


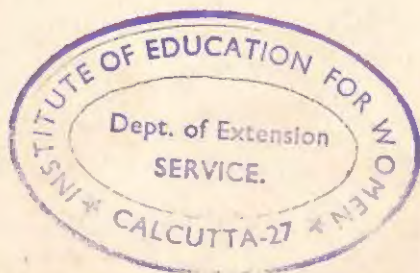
This book was taken from the Library of  
Extension Services Department on the date  
last stamped. It is returnable within 7 days.

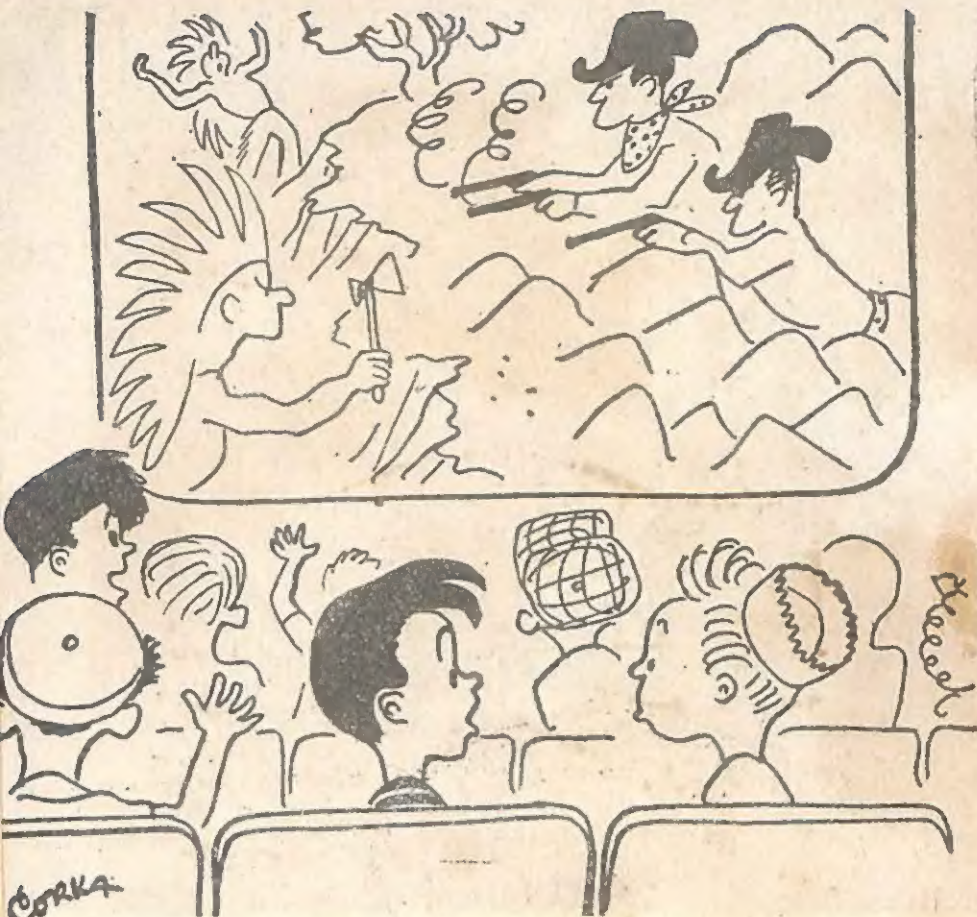
--	--	--	--





LARGE WAS OUR BOUNTY

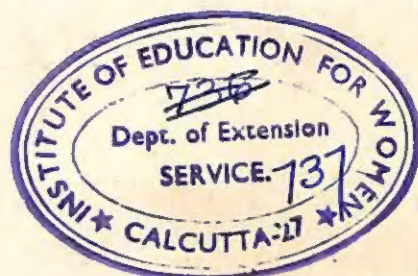




Corha, 1944, Field Publications

"Critical Situation, Isn't It? Notice How Erosion Has Eaten Away the Topsoil"





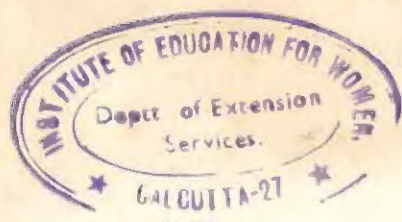
# Large Was Our Bounty:

Natural Resources and the Schools



1948 YEARBOOK, ASSOCIATION  
FOR SUPERVISION AND CURRIC-  
ULUM DEVELOPMENT OF THE NA-  
TIONAL EDUCATION ASSOCIATION

1201 Sixteenth Street, Northwest  
Washington, D. C.



# Committee in Charge of Preparation of the Yearbook

W. J. McGLOTHLIN, *Chairman*

*Chief, Training and Educational Relations Division, TVA  
Knoxville, Tennessee*

JENNIE C. ALLINGHAM, *State Helping Teacher, Rutland, Vermont*

JOHN E. IVEY, JR., *Executive Secretary of the Committee on Southern Regional Studies and Education, University of North Carolina, Chapel Hill, North Carolina*

ELOISE KEEBLER, *Supervisor of Instruction, Fulton County Board of Education, Atlanta, Georgia*

EDWARD G. OLSEN, *Director of School and Community Relations, State Department of Public Instruction, Olympia, Washington*

PAUL B. SEARS, *Head of the Department of Botany, Oberlin College, Oberlin, Ohio*

MAURICE F. SEAY, *Dean of the University of Kentucky, Lexington, Kentucky*

Copyright, 1948 by the  
DEPARTMENT FOR SUPERVISION AND CURRICULUM DEVELOPMENT  
NATIONAL EDUCATION ASSOCIATION  
1201 Sixteenth Street, Northwest  
Washington 6, D. C.

Price \$2.50

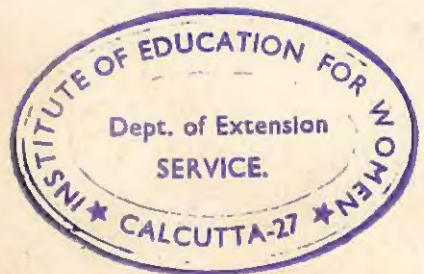


# CONTENTS

About This Book . . . . .	7
---------------------------	---

## CHAPTER

1 In What Direction Are We Moving? . . . . .	12
2 Why Are We Concerned? . . . . .	22
3 How Has Our Thinking Expanded? . . . . .	32
4 What Principles Shall Guide Us? . . . . .	44
5 What Are Schools Now Doing? . . . . .	70
6 How May We Move Ahead? . . . . .	125
Acknowledgments . . . . .	148
List of Members . . . . .	153





## About This Book

THIS yearbook is made up of a glance at the past, a look at the present, and a glimpse into the future. Its concern is with the development and use of our natural resources, and what schools are doing to make our use wiser.

Hardly a newspaper issue appears without reference to national misuse of our natural resources. We read of soil depletion, of burning gas at oil wells, of forest destruction, and of whole species of wildlife disappearing almost overnight. We read of plans for stock-piling strategic minerals which become scarcer each day within our borders. Our bountiful heritage of thousands of years begins to show results of abuse. If we acted on what we know, there might be little need to be disturbed because we have so rapidly spent so much of our natural bounty. Wiser actions even now could preserve a sufficiency for our need. But there are many who do not know; there are others whose actions betray their own best interests and the best interests of the society of which they are a part. That is why the school is obligated to make the facts of resources known; to make the possible choices and consequences clear; and to guide individuals to establish sets of values which will balance immediate gain against future need and private riches against social good.

Society rests on its resources—its fields and rivers, its lands and its sunshine, its minerals and its trees. And society thru ill-chosen or ill-directed efforts can destroy itself thru destroying its base. Sixth-grade children can see that. Down in Georgia at the Sand Hill School in Carroll County, a teacher had spent several weeks with her class, studying the soils and forests and rivers of her section of the state. As the study spread out she showed the film, *The River*. Children were

tense as the tragedy of destruction passed before them. They saw the forests blackened and broken, the river in flood, the people fleeing. After the lights came up, some children talked about the weird music, some about the way people had been driven to the house tops while their barns and cattle floated off. One boy shook off the magic of the sounds and scenes, however, and with flashing intelligence cut to the core. "What interested me," he said, "was that the people done it to themselves." Perhaps his grammar was incorrect. His thinking was all too right.

It was with the hope that schools can point to better understanding and wiser use of our resources that this yearbook was written. Enough schools are doing something to encourage that hope. A background was needed, however, to highlight the history of efforts in the United States, and to present a body of thought, which has been formed by the many efforts of scientists, to identify the ways in which we can develop, use, and continue our resources. Against this background, school practices drawn from all parts of the United States provide illustration and encouragement. Schools which concern themselves with community needs are bound more and more to illumine the relationships between life and its physical environment as well as the relationships among people themselves. Such schools therefore begin to study and explore the natural resources from which communities draw their sustenance.

Finally, this volume looks toward the future, and suggests some guides for action. Obviously, an understanding of the environment and its relationships has to precede effective teaching about it. The future may bring changes in both preservice- and inservice-teacher education. It may bring increasing study of communities their organization and their sources of support, and more attention to the need for the kind of community intelligence, which knowing what it

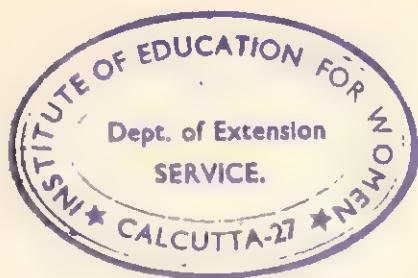


wants, plans with care how to use all the materials at hand to reach its ends. Perhaps, also, the future may bring the desired program of education which will guide the natural and social sciences into a single stream of human knowledge channeled by social good.

It's a long way back to the time when this book was first conceived. The Committee extends its warm thanks to many collaborators and contributors along the road. Those who wrote and sent examples of school practices and supplied pictures are listed under "Acknowledgments." Without them, the chapter of examples could not have been presented, and the volume could not have been brightened by illustrations. To Gertrude Hankamp the Committee is particularly grateful for willing assistance with many details and with the substance of the volume itself. The chairman has a special word of thanks for Mrs. Jackie Thompson, his secretary, whose good-humored aid made the whole task easier.

The chairman wrote a rough draft of Chapters 1, 2, 3, 4, and 5, after the Committee had approved an outline. Dr. Olsen prepared the original draft of Chapter 6, using some materials already drafted by the chairman. Both as a group and individually, the Committee carefully reviewed and revised these drafts, so that the present product has been shaped by many hands. Its virtues have been strengthened and its faults minimized by that fact. You, as readers, will judge which way the balance lies.

—The 1948 Yearbook Committee



... this philosophy [of education] commits itself, first of all, to the building of a new culture. It is infused with a profound conviction that we are in the midst of a revolutionary period out of which should emerge nothing less than control of the industrial system, of public services, and of cultural and natural resources by and for the common people who, throughout the ages, have struggled for a life of security, decency, and peace for them and their children.

—THEODORE BRAMELD



## In What Direction Are We Moving?

DOWN in Louisiana, Ascension Parish lies some sixty miles from New Orleans, a rural area untouched by industry, largely depending on the rain, the soil, the sunshine, for its support. Its living has changed but slowly over its history. It has the soft talk of the Deep South, the presence of white and Negro groups, the constant struggle to make a living out of the soil and its products.

### "You Can See the Difference"

But visitors have been coming to Ascension Parish in increasing numbers to see how the parish schools have made themselves an essential part of social change. They have come to see and admire a series of planning efforts undertaken each year, thru which the school staff and other public agencies of the parish have guided the schools to a new emphasis on community betterment. "You can see the difference when you cross the parish line," a visitor said. He came to study the ways Ascension Parish has found to relate its school work to the problems of the community. He went out to see the schools and the instructional program, to find out how, in a few brief years, the program has been transformed from a traditional one into something vital both to the community and to the students of the schools. He saw schools with canning centers, feed mills, grist mills, and shops for repair of tractors, trucks, and cars. He found classrooms enlivened with exhibits and displays, and many other supplementary



*Ascension Parish, Louisiana Schools*

White Clover Brightens the Well-Kept Grounds of a Louisiana School

materials of instruction, such as maps, charts, books, and pamphlets. He found the school buildings often being used as community recreation centers. He saw school gardens supplying many of the school lunchrooms.

In a twelve-grade school of four hundred students, for example, he discovered that many new teaching aids are used in the social studies, which are directed toward problems rather than topics and are correlated with study in other fields, such as art and literature. Teachers have prepared materials and planned units in the language arts, with special reading materials for boys and girls who need them. Science and mathematics study are applied to local situations, using problems based on conditions and facts present in the parish. Materials of instruction include films and records as well as the specially prepared materials. Primary grades have their own room libraries, with a centralized library for grades four



thru six, and another for grades seven thru twelve. Circulation runs more than twenty volumes per student each year. Books and magazines are continually circulated to homes in the community.

In the same school, vocational agriculture is closely related to the community life. Boys take a five-year course, carrying on activities at home under the supervision of the teacher. Six to eight thousand chicks are sold to the community each year. An Agricultural Fair and Horse Show, first sponsored by the school, has become an annual community event. Industrial training is also given for five years, with instruction in blacksmithing, auto mechanics, electrical wiring, electric motors, repair of farm machinery, cabinet-making and repair of furniture, and carpentry. Home economics includes the usual cooking and sewing, but also aspects of child development and child training.

Most important, perhaps, is the fact that each area is related insofar as possible to other areas of work. The Agricultural Fair and Horse Show provides theme topics in English. Surveys of food habits in the school provide work on graphs in arithmetic.

Significantly, all agencies of the community are brought into close relationship with the efforts of the school. The State Welfare Department works with the school on problems of sight conservation; the Agricultural Extension Service with the school on problems of soils, home living, and nutrition; the State and Parish Departments of Health, on speech correction and other phases of health. Ascension Parish has found that all its community agencies can aid in gaining better results from its resources. The effects appear both in the school and in the community.<sup>1</sup>

---

<sup>1</sup> Adapted from, *Ascension Parish (Louisiana) Program To Improve Living Through Community Education*. Issued by the Ascension Parish Schoolboard with the cooperation of participating agencies, Donaldsonville, Louisiana. November 1946. (Mimeo.)



*Ohio Conservation Laboratory*

*Measuring Run-off of Surface Water at the Conservation  
Laboratory, Leesville Lake, Ohio*

### **A School without a Classroom**

If our educational visitor, tiring of the flat land of Louisiana, left it for the rolling country around Leesville Lake east of New Philadelphia, Ohio, he could find a school without a classroom that uses two acre plots for textbooks. This school is not for young students, but rather for their teachers, who gather for six weeks of the summer to learn about man's place in nature, and to develop a point of view based upon personal knowledge and experience. They come to work with a staff of highly competent instructors who represent the four aspects of knowledge having to do most directly with resources—earth science, botany, zoology, and social science. The students find that the subjects are not kept distinct, however, but are interlocked to increase their understanding of how the total environment operates, and how man's use affects that



operation. They come to understand how soil, plants, and the varieties of life existing in the environment all fit together into a community of life. They learn to trace the effects which misuse of resources will have on social and economic conditions, and they discover ways to use the environment effectively and wisely. They find that problems of resources vary from region to region, and that each region has its own opportunities.<sup>2</sup>

The "laboratory" in which this learning takes place is the country around the lake. Each group of two students is assigned to a plot of ground—a two-acre strip of woods and clearings. The students' goal is to observe, measure, and correlate—to study all the life found in the two acres and to identify its relationships. To do this they execute many tasks looking toward a complete, detailed understanding of the geology and soils of that small segment of the earth's surface and of the plant and animal life it supports. They look at soil profiles from the top to the bottom of the slope, examining and sketching the leaf litter and humus, and the depth and texture of the topsoil, subsoil, and parent soil. They take samples of stream and run-off water before and after rain to judge the effect of water on soil retention. They chart the channels of air and water drainage, and note the mineral resources. They find out how the land is used in the present and was used in the past. They study the plants, the animals, and the insects on the two acres, searching to find the sources of that life, and the ways it builds its organized community. Miniature nature trails are set up as models for the school back home—not merely to exhibit the beauties of the environment but to illustrate the principles of its operation. A complete ecological picture is drawn, showing the relationships of life to inanimate nature, of life to life, and of natural processes

---

<sup>2</sup> Adapted from Conservation Laboratory Circular, *Conservation Laboratory*, State Office Building, Columbus, Ohio.

to the welfare of man. Science branches are drawn together into the larger and more comprehensive science and art of ecology, of the patterns in which life builds on other life and on non-life. The visitor watching this intensive study can be sure that the teachers will return to their classrooms with a vivid and vital sense of the relationships between man and his environment. They will be better able to present science and social science as subjects of real meaning in students' lives and to plan learning activities with children and youth.<sup>3</sup>

### Reading for Living

Perhaps our educational visitor may double back on his path, moving now from the hills of Ohio to the mountains of Kentucky. Passing thru Lexington, he stops off at the Uni-

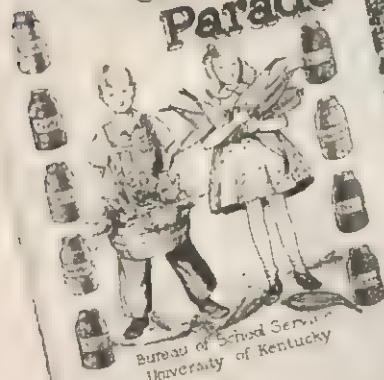
---

<sup>3</sup> Adapted from *Soil Conservation*, United States Department of Agriculture, October 1943.

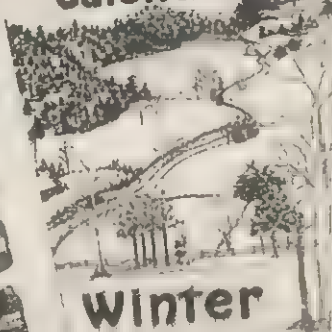
#### Reading Materials for Kentucky Boys and Girls

*University of Kentucky*

## Vegetables on Parade



## Garden Calendar



## John RAISES CHICKENS





versity of Kentucky to investigate preparation of special materials of instruction which look toward better use of resources and may provide a significant evaluation of the process of education itself. At the university he looks in on a materials laboratory, where preparation of new readers for school use is going on. He picks one up and finds, somewhat to his surprise, that this seems unlike any reader he has seen before. It isn't printed from set type for one thing, and the drawings are largely line drawings, done by a person with skill but hardly a slick professional style. It is paper-backed and small. But what strikes him most is that it and others like it deal with immediately earthy subjects—how to raise goats, how to raise a garden, how to get rid of garden pests, how to raise chickens. He notices that some readers are in the vocabulary and at the reading level of the primary grades, but others are suitable for the sixth grade and beyond. And he finds them of absorbing interest, so he examines them with a realization of their possibilities in the learning program.

Our traveler then goes to two of the mountain counties of Kentucky. There soil has eroded from the hills in many places; one-room, unpainted houses reflect the drabness of the one-room schools; and the effort to make a difficult living seems to have been almost too burdensome. In the school to which he goes, however, he finds a strange thing. Children are studying those new readers, paper-bound and lithographed, with the same absorbing interest that he himself had experienced. When he talks with the teacher after the day is over, she tells him that the pupils not only show more interest in the newer material, but have a noticeably increased ability to read, and write, and figure. The material has aided the children in learning the "tool" subjects. And, the teacher says, the diets of the children are changing as they read these materials on food. Better lunches are being brought to school, more gardens are being planted in the community, and more

milk goats are being kept. Gradually it is being proved that the school can change the community, and that reading materials dealing with significant problems of the use of resources effectively modify the use of those resources and the living of the people.<sup>4</sup>

### Where Do These Changes Come from?

The educational visitor, having seen three evidences of educational change, could go on to many others. But, being of thoughtful turn, he stops for the moment and begins to ask himself where these changes come from. What forces lie behind this kind of school interest which looks toward a better understanding of environment and ultimately a better use of the resources that the environment supplies?

These schools and programs are clearly pointing toward more effective education—if we can judge effectiveness by usefulness in people's lives. Ascension Parish, with its direct relationship between school and community; Leesville Lake, with its study of practical ecology; Kentucky, with its measurement of diet improvement, cannot be unrelated. They must reflect a common concern about how well man uses his environment and how education can improve the use he makes of that environment. They reflect, therefore, that growing emphasis in American life which considers the close relation between man and his environment, and recognizes the need for better understanding and care of that environment if man's use of it is to be continued and his living to be improved. To some this is known as "conservation"; to others "wise resource-use." Our growing concern with it has been

---

<sup>4</sup> See, Maurice F. Seay and Harold F. Clarke, *The School Curriculum and Economic Improvement*, Bulletin of the Bureau of School Service, Vol. XIII, No. 1, College of Education, University of Kentucky, September 1940; and Maurice F. Seay and L. E. Meece, *The Sloan Experiment in Kentucky*, Bulletin of the Bureau of School Service Vol. XVI, No. 4, College of Education, University of Kentucky, June 1944.

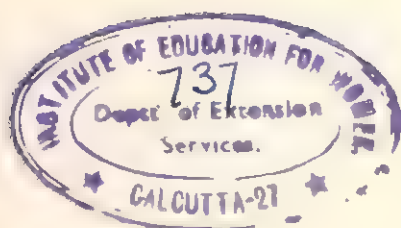


developed, however, over a reasonably long time. Our concern is not new, but its development has begun to quicken only as the problems themselves have become more pressing. We had begun to see them clearly by the turn of the century. Today they stand out in bold relief as problems with which schools must deal.



The strength of our nation is due to the continent of North America. It has molded us, nourished us, fed its abundant vitality into our veins. We are its children, lost and homeless without its strong arms about us. Shall we destroy it?

—STUART CHASE





## Why Are We Concerned?

AS the present century entered its course of startling change, the people of the United States began to look for the first time at the landscape which remained after "conquering a continent." Political and economic dominance had shifted from agriculture to industry. Wealth had rolled into the fortunes made thru exploitation of great virgin resources in wildlife for furs, trees for lumber, gold for exchange, transportation for commerce. The flight from the land to the cities had well begun. America was lusty in the powers of its youth. But America was beginning to show signs of maturity.

Those signs were dramatized by the closing of the frontier, which Frederick Turner considered the major turning point in United States history. For when the frontier closed, when "free" land was no longer available to any who wished, then the "conquest" was completed and the future no longer could depend on newly won areas wrested from hostile human beings and natural forces. Progress from that point would be determined by how well we used what we had. We could no longer move on. We had conquered a continent; we needed now to learn how to keep it.

In natural endowment this was undoubtedly the richest continent of the world, with the possible exception of the land mass controlled by Russia. To such a continent, colonization brought the technics of the industrial revolution and the population overflow of western Europe. The three fac-

tors of development—resources, people, and technics—created, with a speed unknown elsewhere, a civilization of unparalleled wealth and almost boundless optimism. America became the beacon of European dreams, reflected in a tide of immigration that rapidly became a flood. The hope of the European was to attain what earlier colonists and immigrants had achieved. The basic technic rapidly became that of uncontrolled exploitation.

### A Symbol and a Scandal

There were many, many illustrations to which one could point to prove that exploitation was the great American road to fame, success, and security. Chattel slavery in the South; wage slavery in the East; forest extermination in the Middle States (Paul Bunyan became a national myth, a folk hero whose simple method of lumbering was to hold a section of trees in a river until the soil at their roots washed away, leaving no soil and no trees for future use); land destruction on the Atlantic Seaboard; decimation, if not destruction, of wildlife in many sections of the country. By a stupendous irony, the South's exploitation of slaves was shifted to the East's exploitation of the South and West, as thru tariffs, discriminatory freight rates, and control of capital and patents, the East forced the other sections of the country to remain in virtual colonial status.<sup>1</sup>

Exploitation became almost a national symbol, and a national scandal. But it can't be rightly judged from outside its era. To the European the resources of the United States did seem endless; to the New England shipowner and the Southern planter, slavery seemed economically sound and eventually morally defensible; to the farmer, trees were "weeds" which had to be cleared before crops could be planted; a

---

<sup>1</sup> See, Mezerik, *Revolt of the South and West*. New York: Duell, Sloan and Pearce, 1946. Bernard DeVoto, "The West against Itself." *Harper's* 194: 1-13; January 1947.



continent had to be conquered before it could be used; the doctrine of individual enterprise was needed to cope with frontier situations where the rifle had to precede judicial decisions; and the individual good of today had to precede thought of community good for tomorrow. To be sure, communal living was briefly and unsuccessfully attempted at such places as Brook Farm, Fruitlands, and Oneida, but these were the "lunatic fringe," whose foibles and failures amused the more "practical" folk whose eyes held steadily to the main chance.

There was some revolt with sufficient force to disturb the complacency of the dominant groups. The Populist movement was essentially agrarian, with support from a beginning labor movement. Its symbol, Bryan, dramatized its plight in his famous "cross of gold" address but populism was later so completely submerged that when various parts reappeared (such as the income tax under the Sixteenth Amendment) few recognized their source. Industrial and business dominance remained supreme. The doctrine of "free enterprise" became the rallying cry of those who wished to continue exploitation unchecked by the restraint of social benefit. A pioneer necessity had become a modern menace.

### From Vegetable to Machine Civilization

The land frontier was closed, but another change was also highlighting the development of the United States. Agriculture was being superseded as the major vocation. The great fortunes distilled from virgin forests and lands were giving way to fortunes from industry and commerce. By 1929, for example, New York State accounted for 276 of the 513 persons in the United States whose incomes equalled or surpassed \$1,000,000.<sup>2</sup> This corresponded closely with the fact that

<sup>2</sup> H. W. Odum, *Southern Regions of the United States*. Chapel Hill: University of North Carolina Press, 1936. p. 452.

the Northeast at the same time accounted for 57.7 percent of all the manufacturing establishments in the United States.<sup>3</sup>

In 1930, more than 60 percent of the people lived in metropolitan areas.<sup>4</sup> A total of 76.2 percent of all workers were occupied in "manufacturing, mechanical distribution, and social services."<sup>5</sup> Agriculture provided less than 13 percent of the nation's income.<sup>6</sup>

This was more than an amazing shift in the way the United States made its living. It was more than exchanging the calm darkness of a country road for the brilliance of the boulevard, more than zest for the bustle of the metropolis. It was a shift from a dependence on one part of the environment to new dependence on another, for as the United States moved with increasing rapidity from agriculture, forestry, and wildlife to industry and commerce, it added to its major dependence on crops, trees, and animals a crucial dependence on coal and iron. In 1880, 70 percent of our needs for energy came from wood, feed, food, and water power; in 1929, 85 percent came from coal, oil, and gas.<sup>7</sup> We had moved from a "vegetable" civilization to a "machine" civilization.<sup>8</sup> In doing so, we enlarged our use of resources so that we used greater and greater amounts both of resources which had the possibility of being renewed and of those which could be used but not restored. Because of our superior endowment with these resources, we built surplus wealth so quickly that by 1920 we crossed the financial divide and became creditor nation to much of the world.

---

<sup>3</sup> *Ibid.*, p. 451.

<sup>4</sup> *Ibid.*, p. 425.

<sup>5</sup> *Ibid.*, p. 426.

<sup>6</sup> *Ibid.*, p. 425.

<sup>7</sup> Howard P. Emerson, editor, *Applications of the Common Mooring*. Knoxville, Tenn.: TVA, 1943.

<sup>8</sup> See, Erich W. Zimmerman, *World Resources and Industries*. New York: Harper and Brothers, 1933. p. 58-73.

By 1900, we had created the myth of "inexhaustible" resources. We had also increased our demands on the environment for physical resources which are renewable and for resources which cannot be renewed. We had combined a need for personal incentive and reward, "free enterprise," with the technic of the corporation, and had used it to defend the principle of the trust and the monopoly. The result had been effective beyond hope in subduing a continent. But at long last we slowly began to see that we had spent much of our capital without reckoning on tomorrow. We had stripped the accumulated wealth of centuries in a hundred years. The glorious white pine of Upper Michigan, one of the most beautiful and useful of all native woods, was gone in thirty years after the saw was first set to its trunks.<sup>9</sup>

### The Pendulum Begins To Swing

Altho the major trend had been toward unchecked and often irresponsible exploitation of resources, other influences were already at work to offset, in some part, the destructive surges of our national life. The first of these was the establishment of colleges devoted to the teaching of "the agriculture and mechanic arts" (1862). These colleges, created from funds obtained by federal land grants to the states, became centers for teaching, research, and ultimately off-campus advice on scientific land-use and agricultural and forest practices. Ten years later efforts to place strategic forest areas under federal control began with the establishment of the Yellowstone National Park (1872), and forest reserves were established with increasing speed until by 1909 nearly 200,000,000 acres were under federal control. The Forest Service was established in the Department of Interior, the Federal Game Act was passed, and the Inland Waterways Commis-

<sup>9</sup> See, John Bartlow Martin, *Call It North Country*. New York: Alfred A. Knopf, 1944.



sion established (1907).<sup>10</sup> In 1908, however, came the first effort to create a wide public support for careful use of United States natural resources. In that year, President Theodore Roosevelt called a White House Conference on Conservation, to which he invited governors of all the states, meeting together as a group for the first time in United States history, members of Congress, scientists, and significantly, educators. The invitation to the governors stated:

"It seems to me time for the country to take account of its natural resources, and to inquire how long they are likely to last. We are prosperous now; we should not forget that it will be just as important to our descendants to be prosperous in their time."<sup>11</sup>

The governors adopted a set of principles which pointed to new directions. In part they agreed:

"We declare our firm conviction that this conservation of our natural resources is a subject of transcendent importance, which should engage unremittingly the attention of the Nation, the States, and the people in earnest cooperation. . . .

"We agree that the land should be so used that erosion and soil wash shall cease; and that there should be reclamation of arid and semiarid regions by means of irrigation, and of swamp and overflowed regions by means of drainage; that the waters should be so conserved and used as to promote navigation, to enable the arid regions to be reclaimed by irrigation, and to develop power in the interests of the people; that the forests which regulate our rivers, support our industries, and promote the fertility and productiveness of the soil should be preserved and perpetuated; that the minerals found so abundantly beneath the surface should be so used as to prolong their utility; that the beauty, healthfulness, and habitability of our country should be preserved and increased; that sources of national wealth exist for the benefit of the people, and that monopoly thereof should not be tolerated."<sup>12</sup>

<sup>10</sup> See, George T. Renner, *Conservation of National Resources*. New York: John Wiley and Sons, 1942. p. 42-43.

<sup>11</sup> Quoted, Van Hise and Havemeyer, *Conservation of Our Natural Resources*. New York: Macmillan Company, 1931. p. 531.

<sup>12</sup> Quoted, Van Hise and Havemeyer. *Op. cit.*, p. 532-33.

Brave words indeed, and for that day, strong ones. And the governors followed the conference with action. Nearly every state established conservation commissions. Theodore Roosevelt himself established a National Conservation Commission, but the Sixtieth Congress not only denied funds to the commission, but also prohibited other bureaus from assisting it. This negative action of the Sixtieth Congress foreshadowed action by the Seventy-Eighth Congress, which in similar fashion destroyed the National Resources Planning Board established by the late President, Franklin Roosevelt.

The chief accomplishment of Theodore Roosevelt was to focus national attention on the problems of natural resources, and the need for care and planning in their use. Actual results, beyond significant withdrawals of lands from the public domain, now seem fairly small, but Roosevelt had set for himself a large task in attempting to reverse major tendencies in American life. With World War I, destruction of resources grew apace, leading on to the crash of 1929, when production so greatly outran consumption that wheat piles were set on fire turning food into smoke while children went hungry. Even after Franklin Roosevelt had become President, the carry-over of classic economics so misguided our efforts to raise prices that we plowed crops under and slaughtered day-old pigs.

### An Emerging National Policy

But Franklin Roosevelt, from the beginning of his administration in 1933, created a conservation program of great breadth. A roll call of administrative agencies is enough to suggest its size. The Civilian Conservation Corp, the National Resources Planning Board, the TVA, the Soil Conservation Service, the Bureau of Reclamation in projects like Bonneville and Grand Coulee Dams, and many others, executed functions which began to change the face of the continent. In

1934, the Taylor Grazing Act withdrew all that remained of the public domain for permanent grazing land. Wise use of resources was coming to be recognized as a needed national policy.

### Where Are We Now?

Let there be no mistaken belief, however, that the accomplishments of the past forty-five years have firmly established the principle of public benefit as a guide to use of resources. Every advance has been made over strenuous opposition. The right of the federal government to capture the use of falling water at dams constructed on navigable streams, first stated by Theodore Roosevelt in 1903 in vetoing a bill to authorize construction of a dam at Muscle Shoals, Alabama, became the center of continuing controversy, ultimately reaching the

A Ruined Hillside in California

*Soil Conservation Service, U. S. Department of Agriculture*





Supreme Court in attacks on TVA.<sup>13</sup> Attacks on the Taylor Grazing Act are gaining force in an effort to return to private ownership lands which now protect the grazing areas on which the cattle industry depends.<sup>14</sup> Harold Ickes resigned as Secretary of Interior from the Truman Cabinet after a bitter controversy over whether public oil resources should be devoted to private ends.

The struggle continues, but after forty-five years it is no longer one-sided. Use of our resources is recognized as a pressing issue in our national life, and some of our well-nigh disastrous choices on how we shall use these resources are being righted. Furthermore, our knowledge of resources and how they operate has increased greatly. To some extent, at least, we have made that knowledge part of the consciousness of people generally. We now know that many resources are not inexhaustible—tho we may not always act on that knowledge. We know that ruthless exploitation runs counter to continued national well-being. We know that natural resources are tied tightly to one another and cannot be used or treated in isolation. Above all, we are beginning to realize that we are all utterly dependent on our physical environment for the continued existence of our civilization and ourselves. We can begin, at long last, to learn how to use our continent, and to have it, too.

---

<sup>13</sup> House Document 427, Fifty-Seventh Congress, Second Session, Serial 4531.

<sup>14</sup> Bernard DeVoto, *loc. cit.*

Perhaps no greater revolution occurred in the relationship between man and nature—the introduction of fire not excepted—than that brought on by the introduction of science.

—ERICH W. ZIMMERMAN

## How Has Our Thinking Expanded?

DURING the years following 1900, we made many significant advances in our knowledge of resources. The first act of the National Conservation Commission was to take an inventory of the natural resources of the United States, an immense task long overdue. Endorsed by the governors of the states, the three volume inventory was presented to President Theodore Roosevelt in 1909.<sup>1</sup> Later, under Franklin Roosevelt, the National Resources Planning Board brought the inventory up to date as a means of guiding its efforts and of focusing attention on problems of resources of that time.<sup>2</sup>

These works told what we had. We began also to increase our applications of science to the needs and desires of daily living. Gasoline and Diesel engines set us on wheels. Magnesium began to be recovered from sea water. Aluminum reduction and fabrication expanded from an infant industry to a gigantic one. New uses of wood and waste fiber were developed in products ranging from rayon to newsprint made from pine. Agricultural experiment stations uncovered better strains of plants and increased our command of fruitful practices in land-

---

<sup>1</sup> *Report of the National Conservation Commission*. Senate Document No. 676, Sixtieth Congress, Second Session. Washington, D. C.: Government Printing Office, 1909.

<sup>2</sup> U. S. National Resources Committee. *Regional Planning*. Washington, D. C.: Government Printing Office, 1936-1943. (Twelve parts.)

See also, J. Frederick Dewhurst and Associates. *America's Needs and Resources*. New York: The Twentieth Century Fund, 1947.



use and land management. In biology, the science of ecology, concerned with laws of relationships among parts of the environment, received increasing attention. The social sciences contributed the approaches of cultural anthropology, economic geography, and regionalism as points of view from which to study relations between man and his environment. As never before, we were becoming equipped with knowledge of our environment and control over it. We reached a climax of this control when, for purposes of destruction, we unlocked the atom in a searing flash over Hiroshima.

### The People Learn

Some research results found their way into books intended for popular information so that wise use of resources could be understood by all. The inventory of national resources, reported by the National Conservation Commission in 1909, was followed in 1910 by the publication of the *Conservation of Natural Resources in the United States*, prepared by Van Hise of the University of Wisconsin. For twenty years it was the standard text in the field.

With the 1930's, and the revived interest in our economic problems, several books of general interest followed in quick succession. Van Hise's book was revised and largely rewritten under the editorship of Loomis Havemeyer of Yale and republished in 1930 as Van Hise and Havemeyer, *Conservation of Our Natural Resources*. In 1933, Erich W. Zimmerman of North Carolina published his exhaustive *World Resources and Industries* which set forth a valuable conceptual framework as well as extensive information on resources. Odum's *Southern Regions of the United States* appeared in 1936 to document and analyze a whole region. *Our Natural Resources and Their Conservation*, edited by Parkins and Whitaker, became a standard college text on its publication in 1936. J. Russell Smith in 1937 presented an economic ge-

ography, *Men and Resources*, which emphasized "intelligent use of resources in contrast to the wasteful practices of the frontiersmen."<sup>3</sup> In more specialized fields but designed for popular information, were books like Sears' *Deserts on the March* (1935), and *This Is Our World* (1937), which provided popularly written but scientifically sound treatments of ecology in American life; and Chase's *Rich Land, Poor Land* (1936), Lord's *Behold Our Land* (1938), Shepard's *Food or Famine* (1945), which dramatized with poetic vigor the plight of our soil and steps needed to restore it.

### Hoarding—a Misconception

These many efforts brought the subject of conservation vividly to the attention of the American people. They also materially advanced the ideas underlying thought about resources and, therefore, pointed to new guides for action. From 1908 on, conservation as a movement had recognized that its purpose was wise development and use of resources with consideration for both present and future needs. Unfortunately, it sometimes came to be considered in the public mind as primarily concerned with *reduction* of use—an effort to limit and slow the nation's withdrawals from its bank account, and in extreme cases, to freeze that bank account from further use. As late as 1936, Wallace W. Atwood felt it necessary to state: "Conservation does not mean restriction from all use. . . ."<sup>4</sup> W. A. DuPuy had needed to state in 1932 that "Conservation does not mean the hoarding of natural resources for a hazy indefinite future. . . ."<sup>5</sup> Altho writers on conservation struggled to overcome this misinterpretation, it continued and may have caused Franklin Roosevelt first to

<sup>3</sup> J. Russell Smith, *Men and Resources*. New York: Harcourt, Brace and Co., 1937, p. v.

<sup>4</sup> Parkins and Whitaker, editors. *Our Natural Resources and Their Conservation*. New York: John Wiley and Sons, 1936. p. 19.

<sup>5</sup> R. L. Wilbur and W. A. DuPuy. *Conservation in the Department of Interior*. Washington, D. C.: Government Printing Office, 1932. p. 154.

choose the title National Resources Board and later National Resources Planning Board for a board whose functions in many respects corresponded to those of the National Conservation Commission of Theodore Roosevelt.

Part of the misconception undoubtedly arose from federal and state efforts to place greater amounts of land under governmental control. Part may have derived from passage and enforcement of game laws which limited the take of hunters and fishers so that supply could be maintained. Part may have come from those who preferred continued exploitation and therefore tried to mislead the public into a belief that conservation efforts would lower standards of living in the present as we saved our resources for the future. But it seems likely that interpretation of conservation as hoarding was based on a belief that all resources are static, are a fund which can be drawn upon until exhausted. Our major concern would then be to so control the rate of withdrawal that our needs and our children's needs could be satisfied. Concern of conservation action with inventorying resources—that is, counting the funds of available resources—altho highly important, must have helped to crystallize this belief.

### Use—the Prime Determiner

This static view of resources was brilliantly opposed by Zimmerman in his *World Resources and Industries*. Looking at the many changes in our use of our environment—seeing, for example, that for the American Indian coal was not a resource since it was not used, but that for the present American coal was a major resource—Dr. Zimmerman developed the concept that resources were not blocks of material which can be counted once and for all. What made a resource a resource was man's use of it. "A man-less universe," he said, "is void of resources; for resources are inseparable from man and his wants. They are the environment in the service of



man."<sup>6</sup> By this concept, he identified more clearly than had yet been recognized that resources are dynamic, and that their significance constantly changes as science and invention creates new means of satisfying old wants. Science is man's tool in changing his environment, in creating new resources or modifying old.

Emphasis on *use* as the essential character of resources pointed the way to expanded thought on conservation. Man's wants are satisfied thru use of certain parts of the environment. If these parts can be transformed more efficiently to man's use, the value of the part as a resource is increased in direct proportion. Electric generation plants which create a kilowatt-hour of electricity from less than one pound of coal triple the resource available to older plants which required three pounds of coal for the same purpose. A foremost step in wise use of resources is therefore to apply scientific research to discover more efficient ways of using resources.

A corollary step toward wise use of resources is to prevent waste. Methods of lumbering where 40 percent of the tree may be left in the woods or of oil extraction where gas is burned and much oil unrecovered, clearly affect man's ability to satisfy his wants. The interpretation here is in accord with the conservationists who inveighed against waste. However, emphasis on wise use offsets the misconception that conservation planned to brood like the Wagnerian dragon Fafnir over a hoard of golden resources. "... conservation means more than simply putting on the brakes on the production of minerals and other material objects. Insofar as conservation is tied up with economy, it can result from economy of use as much as from economy of output."<sup>7</sup>

Finally, the strategy of conservation must emphasize the need for detailed understanding and careful choice of re-

<sup>6</sup> Zimmerman, *op. cit.*, p. 3.

<sup>7</sup> Zimmerman, *op. cit.*, p. 792.

sources. The first principle is to use the resource for what best suits its peculiar properties; the second is to use those which can be renewed or which are inexhaustible.

"Resources should be devoted primarily, if not exclusively, to those uses for which they possess peculiar or particular qualifications. . . .

"In the second place, strategy of resource utilization decrees a preference for flow resources—vegetation, water, sunshine—over fund resources. . . . The priority system can be elaborated by differentiating fund resources on the basis of absolute scarcity, possibilities of recovery, rate of exhaustion. . . ."<sup>8</sup>

These were real advances. The idea that resources receive their character from use pointed the way to need for research and planning as well as tabulation of resources. Inventories could have exact meaning only at a single point in time, because resources changed as rapidly as man's needs or technics changed. Every advance in efficiency, in reduction of waste, and in *increased* use of under-developed resources, increased the amount of resources available. Development of use, *when needed*, becomes as important as careful use. And all use is to be guided by the characteristics of the resources themselves. Each is to serve its unique purpose, wherever possible. Inexhaustible and renewable resources are to be preferred to exhaustible resources when substitution is economically and scientifically feasible.

### Balance—the Heart of Wise Use

Dr. Zimmerman stressed the dynamic character of resources and their identity with use. Other writers of the twentieth century thru a wealth of research have emphasized anew the principle of balance—a principle which lies at the heart of wise use of resources. That the natural environ-

---

<sup>8</sup> Zimmerman, *op. cit.*, p. 792-93.





ment restored to the soil what plants removed from it had been apparent for years. Animal manures from time immemorial replaced soil minerals withdrawn by cropping and pasturing. John Lorain of Pennsylvania, writing in the 1820's, on *Nature and Reason Harmonized in the Practice of Husbandry*, stated the principle in terms of agriculture:

"The fertility of it [soil] might be preserved and increased . . . if a system of agriculture calculated to keep the ground fully replenished with decaying animal and vegetable matter was practiced, and due attention was paid to the augmentation of live stock, in proportion to an increase of ability, instead of the ruinous practice of perpetual ploughing and cropping."<sup>9</sup>

Lorain was thinking of agriculture alone. Later scientists thru gradual accumulation of fact built a science of relationships—ecology—which brought together information from many sources, but emphasized above all else the interdependence of the natural environment and of the life upon it.<sup>10</sup>

Paul Sears stated the principle in simple words:

" . . . we have not yet built into our culture an understanding of a great law which operates as strictly as the laws which govern the combustion of gasoline or the turning of a flywheel. This law is called the Law of the Balance of Nature. . . .

" . . . soil and living community are each an expression of the other. Together, although perhaps not often at the same rate, they progress toward a condition of final balance and stability. This is literally a climax, which represents the best and most efficient organization of which each is capable under the given conditions. Once reached, and left undisturbed, it maintains itself."<sup>11</sup>

<sup>9</sup> Quoted in, *Early American Soil Conservationists*. USDA, Miscellaneous Publication 449, October 1941. p. 22.

<sup>10</sup> See, for example, W. C. Alec. *Animal Life and Social Growth*. Baltimore: Williams and Wilkins, 1932; W. B. McDougall. *Plant Ecology*, Philadelphia: Lea and Febizer, 1927; A. S. Pearse. *Animal Ecology*, New York: McGraw-Hill Book Company, 1926; Paul Sears. *Life and Environment*, New York: Teachers College, Columbia University, 1939.

<sup>11</sup> Paul B. Sears. "Man and Nature in the Modern World." *Education for Use of Regional Resources*. Washington, D. C.: American Council on Education, 1945. p. 31-33.

The principle applies to water, land-use, land management, energy, and materials. Each of these areas is susceptible to planned action which maintains as nearly as possible a new balance to replace the natural one.

"The materials needed by living things must be used over and over again by succeeding generations. This pattern of use, return, and re-use is called a cycle, and a knowledge of such cycles is the basis of wise land-use and management. By respecting them, we can maintain a balance with nature; by disregarding them, we disrupt the balance and impoverish ourselves."<sup>12</sup>

Respect for the balance of nature suggests, or rather demands, that the goal of resource-use is sustained yield at the highest level. Foresters now speak of "tree farms," where rate of cut does not exceed rate of growth, and the cut is made in such a way as to increase rate of growth. An artificial cycle is established even in minerals such as iron thru the recovery and reuse of large amounts of scrap iron and steel. Our use of coal and oil is being supplemented by increasing amounts of hydroelectric power, dependent on the hydrologic cycle of rain and stream flow. As we develop our dependence on resources which can be used and reused, or which can be used within a continuing balance, we increase the chances that our civilization will be permanent. We have already been warned: "A civilization based on a fund of exhaustible resources cannot be permanent; it is necessarily a passing phenomenon in human history."<sup>13</sup> The scientist, by pointing to the law of balance of nature, added a major concept to the arsenal of conservation. Wise use of resources, it soon became clear, depended on shrewd understanding of relationships among life and environment. No resource can be considered by itself. Each must be considered in relation to all others.

---

<sup>12</sup> Sears, *loc. cit.*, p. 41.

<sup>13</sup> Zimmerman, *op. cit.*, p. 71.

### Regional Planning — a Major Approach

A third major concept added to thinking on resources was regional planning. Stemming largely from the University of North Carolina's social studies program, the concept of regionalism became a useful tool for research and planning. Briefly stated, scores of economic, cultural, and geographic indexes were used to establish the fact that certain states formed themselves into groupings in which the member states were more like each other than like states not of that group. The concept made it possible to plan effectively for a region, because of the region's internal similarities. Research and planning on a regional basis could then supplement state planning which was often based on too small an area in which to find adequate solutions. To a degree it would localize national research and planning, which often would be based on too wide an area to be caught up into action. In speaking of regions, Dr. Odum states: "Here are groupings of states, tending to constitute relatively homogeneous areas of culture and geography."<sup>14</sup> Development of better ways to deal with social problems must come from a regional approach:

"The merits of the regional approach to national study and planning inhere not only in this greater probability of attaining a national and interregional balanced social and political economy, but also in the opportunity for a better understanding and more effective and orderly development of each regional unit based upon essential differences, capacities, needs, fitness."<sup>15</sup>

The region should become the center of attention because its similarities make it possible to deal with it as a unit. It is large enough to encompass the major factors in modern life. It is small enough to provide a basis for study and joint action among states.

<sup>14</sup> Odum, *op. cit.*, p. 247.

<sup>15</sup> *Ibid.*, p. 251.



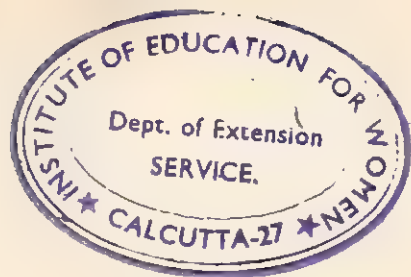
It should be crystal clear, however, that these analyses did not point toward the division of the United States into opposing principalities. "... regionalism envisages the nation first, making the national culture and welfare the final arbiter."<sup>16</sup> The ultimate goal of regionalism is regional balance, in which each region contributes its best development to national welfare.

The importance of regionalism to wise use of resources is great. Resources have a locus, a place. Regionalism suggests that study of resources and action taken on them begin with the region, and look from it to the national framework in which all regions rest. Regions are not self-sufficient, but their natural resources, their urges and drives, their culture, their problems are sufficiently uniform to make agreement on ends and means feasible and joint action possible. "The significance of the idea of region, however, lies not in the definition . . . but in the search for unity—unity in a common cause for work and action."<sup>17</sup>

Emphasis on usefulness as the distinguishing characteristic of resources, on the balance of nature as the guide to establishing principles of resource use, on regional planning as a major approach to solutions of problems in American life, were significant new ideas. They so broadened the ideas lying within conservation that the southern states began to call their educational effort in the field *resource* or *resource-use* education rather than *conservation* education. The purpose was the same—to build a better life now and in the future from the materials at hand. To do so, knowledge of the major principles of wise resource-use is needed.

<sup>16</sup> *Ibid.*, p. 253.

<sup>17</sup> Gordon R. Clapp and W. J. McGlothlin. "Steps Toward Regional Development." *High School Journal*. May 1946. p. 109.



First, and most essential, we must know the physical realities which we face. Too long we have reckoned our resources in terms of illusion. Money, even gold, is but a metrical device. It is not the substance of wealth. Our capital is the accumulation of material and energy with which we can work. Soil, water, minerals, vegetation, and animal life—these are the basis of our existence and the measure of our future.

—PAUL B. SEARS

# What Principles Shall Guide Us?

WISE resource-use can come only as people understand what resources are, how they are classified, and what principles govern their wise use. Resources are not a homogeneous mass from which man chips off certain parts for his use. Each has its own characteristics.

Fundamentally, of course, all our natural resources are built from elements. We have now isolated ninety-four of these building blocks, but actually, only a relatively small number, some twenty-odd, are of major significance in man's existence. Others may become more significant as research finds new uses. Uranium, until recently, seemed an unimportant name. Now it is on everyone's lips, since it holds the key to world control. The significance of elements is that they form the bases of our existence. They make the world in which we live.

We use elements in one way for materials. We use them in their elemental state as iron or aluminum or copper. We use certain combinations of elements as building stone or wood or cotton fiber. But we also use elements and combinations of elements to give us energy. The element carbon in coal or gasoline unites with the element oxygen releasing heat and light. The sun transforms one element—hydrogen—into another—helium—and the process releases enormous quantities of energy. The uranium atom or the plutonium atom splits in two, again releasing energy. Man's search throughout the ages and more particularly from the industrial revolu-



tion on has been to find new and better sources of energy. His release from drudgery and his building of a civilization have been based on his ability to find and use energy, and to find and use materials which will translate that energy into forms useful to man.

All useful elements and useful combinations of them are not distributed evenly over the earth's surface. Some elements are present in inexhaustible supply and are distributed widely. No matter what we do we cannot increase or decrease the sunlight as such. We have limitless stores of nitrogen, oxygen, and hydrogen in air and water. Carbon is present in every living thing. Magnesium is diffused thru all the seas and aluminum is in every clay. But others are less plentiful, and less well distributed. You have only to see the contrast between an irrigated farm and surrounding desert to realize that lack of water, even tho inexhaustible in the world as a whole, may sharply limit the amount of sun that can be captured by plants for man's use.

If every element and every useful combination of elements were present widely in unlimited supply, we should have no problem. But the problem is clear, because certain resources are limited and maldistributed. We can destroy the usefulness of others. Luckily, science has been able to identify certain general principles governing wise use of resources. They are significant guides for action. For, if individuals and nations first understand and then act upon the principles of resource-use, they can reduce the intensity of their problems. By full understanding and intelligent action we can overcome the difficulties H. A. Meyerhoff describes in the January 1947 *Annals*:

"In a country as richly endowed with natural resources as the United States, it is difficult to persuade our statesmen or our politicians—or, for that matter, the public—that raw materials have been so vital in shaping our development and history that they must be a primary consideration in the determination of domestic and foreign

policies. . . . But our civilization is predominantly industrial and from the moment the industrial revolution started, certain key resources predetermined the destinies of nations, though many other factors have modified the rate and the quality of progress which individual peoples have made."<sup>1</sup>

No definition of principles of resource-use can be wholly satisfactory. Every new fact discovered about the way resources act and about the extent of resources available may be sufficiently important to change the principles as they are defined at any one time. And the relative significance of each principle may vary from moment to moment. With this caution, let us look at what some of the more important ideas are behind the use—the intelligent use of the resources that are ours.

### Some Are Exhaustible

*Some resources as air, water, sunlight are inexhaustible; some such as minerals, oil, and natural gas are exhaustible; some such as forest, wildlife, and soil are exhaustible, but are, within limits, renewable.*

This first principle suggests a strategy of resource-use, by grouping resources into classes. Air, water, and sunlight are considered inexhaustible resources because they are available in what appear to be unlimited amounts. To be sure, water may be too abundant, as in the tropics, or it may be too scarce, as in the deserts. Even tho inexhaustible in the world as a whole, therefore, water may be exhaustible locally.

Minerals, oil, and gas are exhaustible resources because their formation is so slow that it can never keep pace with use. Coal deposits were formed under geologic circumstances which will probably not recur. All such resources are therefore funds, which have precise and definite limits to their

<sup>1</sup> H. A. Meyerhoff, "Some Social Implications of Natural Resources." *The Annals of the American Academy of Political and Social Science*. January 1947. p. 20.

amounts. Furthermore, they are not distributed evenly. Some of them are the fortunate possession of relatively few countries. But whether or not they have needed exhaustible resources within their own borders, industrial nations of the western world have been built largely upon the fund resources of iron ore and coal. So long as we continue industry, we cannot stop using fund resources. We can find ways to reduce waste caused by overproduction or by inefficient consumption. To some extent, particularly in the metal minerals, we can create a cycle of use and recovery for further use thru collection and refabrication of scrap. But we cannot prevent ultimate depletion of these exhaustible resources.

Resources like trees, wildlife, and soil are renewable because if we use them wisely, natural growth creates an "income" which can be used without destroying the goose which lays the egg. We can use and have these resources continuously if we follow the natural laws which govern their growth. We can, on the other hand, so misuse them that for all practical purposes they are not renewable but are exhaustible. The forests of northern Michigan have never recovered from the hand of the early lumberman. The soil of Georgia, in parts of the state, has been so harassed by misuse that it can no longer provide the elements needed to sustain plant life. The dust storms of the 1930's created "deserts on the march," and left wide areas scarred to the hardpan below the topsoil, virtually powerless to sustain further growth. The bison and the passenger pigeon, once sources of food and clothing, are no longer. We can destroy beyond recovery, but by wise management we can use and keep our renewable resources.

### All Depend on Each

*Each part of the natural environment is interrelated and interdependent with other parts. Man, in using the natural*



*environment, must recognize and be guided by those inter-relationships.*

The whole of the natural environment, when undisturbed by man, is interlocked by relationships which support its various types of life. Plants are dependent for growth upon air, sunshine, water, and a variety of minerals in the soil. If the plant-grower does not recognize that the plant itself is required for further growth from the soil since its unused stalk is needed to build humus, he has missed the interrelationship and the fertility of his soil suffers. Some parts of the environment, particularly the minerals, do not participate largely in supporting life in the natural state. They seem to be inert masses awaiting the use that man makes of them. Iron ore deposits are of much greater extent than the small amount of iron needed to grow plants. When man begins extracting even such resources, however, he makes a choice among the uses of the environment. If he strips mines for coal, without regard to other resources, he will often destroy the land for agricultural use. He may pollute the streams thru allowing tailings from the mines to seep into the waters to such an extent that all stream life is killed.

Some animals depend on plants for food; others require both animals and plants; still others may live only on animals. Man himself uses plants and animals for food, plants for shelter, and plants and animals for clothing. He uses increasing amounts of minerals in various forms for clothing and for shelter. But the most startling example of interrelationships is probably between land and water. In Ohio, corn growing, with its clean cultured rows, has let the top soil be carried away with the rain. Since water has flowed over the soil, rather than thru it, the level of underground water has dropped a foot a year for forty years. Further industrial development is limited by the loss of water supply. And at Cleveland, miles away from many of the Ohio farms, commercial fishing be-

comes less and less profitable because the stream-borne silt from those Ohio farms muddies Lake Erie, so shading marine plants that they can no longer receive the sunlight needed to sustain them. Water is lost to industry, fish are lost to commerce, and the topsoil on which the farm income of Ohio rests is lost beyond recovery.

### New Balance from Old

*The natural environment, if undisturbed by man, tends to move toward a balance or equilibrium. To satisfy his needs, man must disturb the natural balance; but wherever possible, he must attempt to establish a new balance, from which his needs can be supplied but which preserves the factors which create the resources he uses.*

As we saw earlier, the idea of the balance of nature is a major contribution to the scholarship on resources. Nature, if undisturbed, tends to move toward a community which maintains itself indefinitely unless major climatic or geologic chances occur. Plant and animal life adapt themselves to their environment—to conditions of climate, soil quality, water supply, slope, or drainage. Those which cannot adapt are eliminated. While plants live on the soil, they also return to the soil, and continue its fertility. As they die, they create a type of soil which will support the next plant generation. Their life and death create an unbroken cycle of life, in which increasingly efficient forms of life find their place. The sun's energy is the major "outside" force which moves the cycle onward.

In much the same way, the soil-water-plant-animal cycle or balance operates. Green plants take energy from the sun; carbon, hydrogen, and oxygen from the air; hydrogen and oxygen from water; and minerals, such as calcium, phosphorus, and potassium from the soil. Thru chlorophyll and the sun's energy, they combine these various elements for

animals and bacteria, which convert them back to energy and minerals required for their growth. In turn, the animals and bacteria give to the soil waste products, which contain minerals and nitrogen that are needed for plant growth.

Wildlife, too, is under a system of checks and balances in which certain species consume each other. Generally, no one kind of plant or animal life, no matter how great its powers of reproduction, holds sway over all other things in the natural state. Other species and limitations of food supply prevent dominance of one species.

Water operates in the natural state as part of a cycle. It falls as rain on trees and plants, some of it soaking slowly into the ground, and some of it used by the plants and animals. The rest gradually filters thru the earth, replenishing springs as it goes, and finding its way into clear streams. Its momentary home is the ocean, from which it lifts into the skies as vapor to be again deposited on the land as rain.

Man must disrupt the natural balance to his own ends. He has learned to use parts of the environment which are inert under natural conditions. But only at his peril does he ignore the fact that sustained life is dependent on the principle of balance and on the cycle of the environment in which he lives.

"Fields of crops we must have. But we must, by understanding the great law of nature's balance, so manage them that we maintain something reasonably like it. A great farm planted for year after year in wheat or cotton, even with fertilizer, does not do this. But a farm whose fields are selected with discrimination for plowland, pasture, and wood-lot, and whose plowland is given rest and recuperation as well-managed rotation pasture, with liberal use of legumes and proper mineral fertilizer, can and often does approach a condition of balance and order. Such a farm is marked by sustained yields, by soil retained in place and enriched, by healthy livestock and human occupants. And in terms upon which our culture happens to set a very high value, such a farm is the best kind of a business investment. It

appreciates with the years, whereas the one-crop enterprise depreciates rapidly."<sup>2</sup>

If man is to establish a new balance, he must obtain an intimate understanding of the materials and energy he uses and a firm belief in the need for maintaining the sources of supply. He must take into account the natural conditions of the land he uses, how easily it erodes if farmed, how effectively the use made of it preserves as well as uses it, how the essential elements removed by use can be replaced. He will probably learn to use the natural checks and aids of the environment itself to his purposes. He may place earthworms in his garden to tunnel the soil and to transmute the humus into fertilizer. And he will above all use as fully as he can those parts of the environment which are either inexhaustible or renewable, so that his use either makes no significant difference in the available supply or is limited to amounts which can be replaced. He will attempt to create an artificial cycle for exhaustible resources, reclaiming those which he can, and increasing the efficiency of production and use of the "one-use" resources, such as oil and gas.

### Capture That Energy

*Energy most readily available to man comes originally from the sun. Other sources, such as atomic fission, may become increasingly important. Man must capture as large an amount of energy as possible, and must search for new sources, in order to satisfy constantly growing needs for energy other than that of his own body.*

Only about 2 percent of the energy which the sun pours upon the earth is captured for man's use. The rest is dispersed into the atmosphere. If we could capture all the sunlight, we could match the energy of all our coal reserves in fifteen days

---

<sup>2</sup> Paul B. Sears. "Man and Nature in the Modern World." *Education for Use of Regional Resources*. Washington, D. C.: American Council of Education, 1945. p. 33.





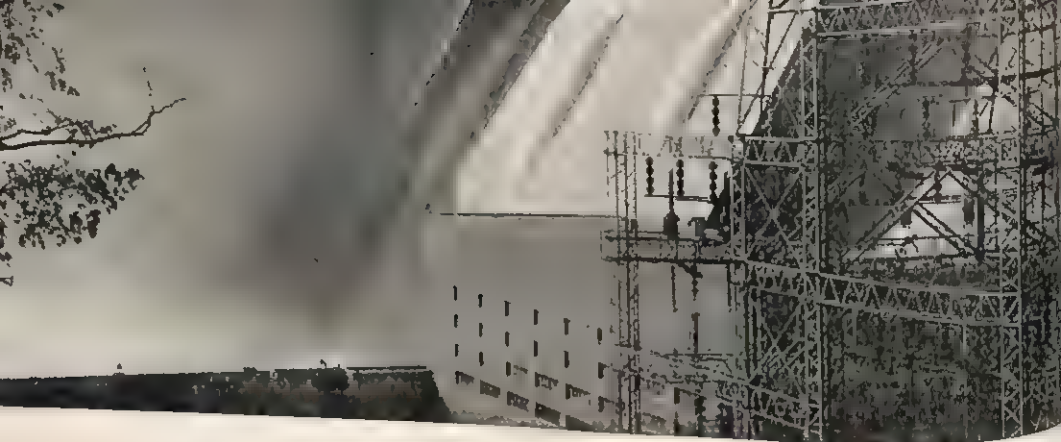
and our oil in a few minutes.<sup>3</sup> Most of what we use of the sun's current energy is captured by plants which, with the help of chlorophyll, combine certain elements from air, water, and soil into carbohydrates, fats, proteins, vitamins, from which living organisms can unlock and use the energy the plants have stored. Under the balance of nature, this is a continuing process.

Another source of the sun's energy is falling water, continually replenished thru the water cycle. The power of falling water has long been used to turn the wheels of mills to grind grain or to saw wood. In more recent times, the power of falling water has been used to turn turbines in hydroelectric dams, changing the momentum of water into electricity, which can be transmitted considerable distances for man's use.

Plants and waterfalls are renewable and inexhaustible resources, based on the energy continuously available from the sun. The same energy has been stored in coal, oil, and natural gas, over long periods of time. It can be recovered for use by mining and drilling. These stores are, of course, exhaustible. They are of extreme significance in the development of an industrial civilization. No modern industrial civilization has been built without adequate supplies of coal, either thru ownership or importation.

Energy lies at the heart of both continuous life and civilization. Its manifestation in gasoline and electricity is clear to all. But it is sometimes less clear that a large portion of energy needed for civilization comes from plants storing energy from the sun. In the Tennessee Valley, for example, the production of electric power for the fiscal year 1943, by the TVA system, was about nine and one-half billion kilowatt-hours. The energy available in food and fiber which

<sup>3</sup> See, H. R. Crane. "Recent Advance in the Physical Sciences." *The Annals of the American Academy of Political and Social Science*. January 1947. P. 1.



Norris Dam Generates Electricity and Stores Water, as Needed, To Reduce Floods

*Tennessee Valley Authority*

came from the land was more than seven times as great. Translated into kilowatt-hours, it corresponded to more than sixty-eight billion kilowatt-hours of electricity. A little less than half this amount came from food and feed; a little more than half from tree growth. "It has not yet been impressed upon us with sufficient force that though man may move to the cities, he does not thereby escape from his dependence upon the land; indeed the growth of cities and of industry increases man's need for roots in the soil."<sup>4</sup> Windmills and water pipes on the roof capture other, but minor, portions of the sun's energy.

<sup>4</sup> "Resources: A Basis for Understanding." *Education for Use of Regional Resources*. Washington, D. C.: American Council of Education, 1945. p. 54.



Norris Dam Generates Electricity and Stores Water, as Needed, To Reduce Floods

*Tennessee Valley Authority*

came from the land was more than seven times as great. Translated into kilowatt-hours, it corresponded to more than sixty-eight billion kilowatt-hours of electricity. A little less than half this amount came from food and feed; a little more than half from tree growth. "It has not yet been impressed upon us with sufficient force that though man may move to the cities, he does not thereby escape from his dependence upon the land; indeed the growth of cities and of industry increases man's need for roots in the soil."<sup>4</sup> Windmills and water pipes on the roof capture other, but minor, portions of the sun's energy.

<sup>4</sup> "Resources: A Basis for Understanding." *Education for Use of Regional Resources*. Washington, D. C.: American Council of Education, 1945. p. 54.



Atomic fission is a significant new source of energy. This may in time free us from dependence on coal, oil, and gas. But different forms of energy are not wholly interchangeable. We can't eat kilowatts, even tho we can make kilowatts from food by changing wheat into alcohol and running an electrical generator with that product. Coal and wood can heat us directly or they, too, can be transformed into electricity with its multitude of uses. Our continuing dependence on the sun points the direction of our effort. It is to find increasingly efficient ways to capture that energy, and to preserve the means by which the capture is made. Man has freed himself from primitive existence only thru the capture and use of energy. He will continue modern civilization only as energy sources are maintained.

### Soil, a Priceless Heritage

*The way man uses soil is fundamental to the quality of his living and to the maintenance of a continuously satisfactory standard of living.*

Man's need for food and fiber points directly to his use of the soil. He depends upon soil for energy needed by his own body and by the domestic animals which help to maintain him. Transfer of the sun's energy into forms useful to man uses the medium of the soil, much as the generator transfers the force of falling water into electricity. If the generator is faulty, or is permitted to fall into disrepair, obviously the energy in the falling water cannot be captured and used. In the same way, the energy available thru the sun's action on the green leaf cannot be obtained for human use if the medium of the soil is unable to sustain the life of plants. The ability of the soil to support an efficient plant life is called fertility, and our hope of maintaining our solar power plant in good shape resides in our ability to maintain and increase soil fertility.

Soil provides more than food. It also provides materials for houses and buildings, and provides clothing to conserve the energy of the body. It accounts for a much larger share of the raw materials of industry than most people suspect. Some 60 to 70 percent of the raw materials of industry, including the food industries, come from crops and wood-products of the soil.

Soil fertility, then, is a concern of all, not just of the farmer or the forest-owner. Fertility is not a simple subject. It has been the focus of continuous study by scientists, who have come to understand that fertility is a complex of many factors, including moisture, humus, bacteria, tilth (a delightful word meaning "plowability"), absorptiveness, minerals, and others. We know that application of mineral fertilizers does not of itself create or maintain fertility. It is profoundly true, however, that a small number and amount of minerals are essential to continued fertility, regardless of other factors, and this small amount of minerals, only about 5 percent of the plant's weight, can be reduced or lost thru soil wash, leaching, overcropping, or neglect.

We come back to the principle of balance. In the natural state, plants and animals returned the essential minerals to the soil. We, however, ship huge quantities of products from the soil, taking with them the essential minerals which supported their growth. Some of these minerals are not only limited in absolute quantity; they are also located in widely separated spots on the earth's crust. Phosphorus, potassium, iron, and sulfur are four of the major elements needed. They are limited. But they are the very ones, especially phosphorus and potassium, we must always have in the soil if the soil factory is to be kept in good repair, that is, if its fertility is to be maintained. These minerals permit the plant to feed on the limitless supplies of sunlight, and of the elements in air, water, and land. They form a vital list—phosphorus, potassium, cal-

cium, nitrogen, and traces of others such as sulfur, iron, boron, manganese, and cobalt. Around the continued availability of these elements, a sound program of soil fertility must be built to insure adequate living for all.

### Water—for Life, Commerce, Industry, and Power

*Water is an inexhaustible resource. Locally, it may be sharply limited or unavailable. It is necessary for man's own use, for growth of plants and animals, for industrial processes, for production of power which can be used to conserve exhaustible coal, oil, and natural gas resources.*

The total water supply of the world is probably inexhaustible, even tho in certain locations it is so scarce as to prevent human use of the area. It is inexhaustible because it can be used over and over again by plants, which draw water thru their roots, and then diffuse water into the air. The power of falling water can be used again and again, thru a series of hydroelectric dams as the water passes on to the sea, to be returned again thru the heat of the sun and the movement of water vapor in the air.

In its primary use, water makes it possible for man to live at all. The history of civilization is a search for adequate supplies of water as well as for land. Efforts of our cities to reach farther and farther afield for satisfactory water supply were anticipated in the viaducts of the Romans. The search for water for personal use leads also to care of the land, since rapid run-off of rain falling on the ground must be prevented. Springs and wells are replenished only when rain is soaked up by the soil and trickles down into the ground. A bare field fills no springs. Industrial uses of underground water may withdraw such large supplies that wells must be driven deeper and deeper and plants dry up in the summer sun. For personal and industrial use, water must be of satis-

factory purity. Dumping industrial and human wastes into rivers and lakes must be offset by large expenditures for purifying the water.

Agriculture is directly dependent on water. Either thru rain or irrigation, which puts the rain where you want it, plants must receive water. Without it, they cannot obtain minerals from the soil or build their plant structure. Domestic animals also are dependent on adequate supplies of water.

But water has other major uses. It forms highways for commerce moved by shipping. It takes part in many industrial processes—in manufacturing steel, textiles, and paper, in the operation of air conditioning, canneries, laundries. Without water, both agriculture and industry perish. And to some extent, their uses are competing, particularly when they both draw upon underground water supplies. The interrelationship of resources can probably be seen as easily in water as they can in any of the resources.

Fire on Wooded Slopes Destroys Needed Wood

*Tennessee Valley Authority*





Finally, water is significant in the production of electric power. It can be used over and over, unaffected and undiminished. Where energy produced by water power, therefore, is used instead of energy produced from burning coal and oil, we are basing our use on a continuing source, which will not fail.

### Forests No Longer Primeval

*Forests are a renewable resource; forests preserve soil, hold underground water, shelter wildlife, supply material for man's use, and add beauty to the landscape. Forests must be protected from fire, insects, disease, and grazing animals. Their use should not exceed their growth.*

Except for crops, forests are the major product of our soil. Forests have the valuable quality of renewing themselves if their environment remains favorable. In no other field, however, has the exploitation of American resources been more apparent than in destruction of forests. They may be renewed by planting and caring for new trees, by restoring depleted forest stands, and by instituting sustained yield forest management. Sustained-yield management merely means that trees shall be treated as a crop, that no more will be cut than can be grown. In this way the forest becomes a perpetual resource if protected from fire, disease, and insects. It continues to renew itself year by year.

This is significant not only because it supplies an unending source of wood. The forests are a crucial factor in control of erosion and of water supply. Tree roots, humus from fallen leaves and twigs, and vegetation on the forest floor protect the soil from the force of the rain, and prevent it from washing away. Leaves and branches break the force of the wind and protect the soil from the wind during the dry season. One of the ways of ending the dust bowl was to plant shelter belts of trees across the continent.

On watersheds, forests help to maintain the water cycle. They increase the amount of underground water by breaking the force of rain with their leaves and branches, so that it falls to the ground broken into smaller particles and slowed in its descent. On the ground the water is caught in the spongy floor of underbrush and moss, from which it slowly percolates into the earth and down thru it reaching to the water table.

Forests provide the habitat for much of our wildlife. When the forest goes the wildlife goes also, and all the restocking in the world will not restore it. Birds, essential to the farmer by their eating of insects, are lost. The forest suffers, and the whole biologic community feels the effect.

Our uses of wood and wood-products are almost without end. We burn trees for fuel, we shape them for shelter, we tap them for sugar, and we break them down into their parts to make dyes, paper, and cellulose. These are only a few of many uses. But they are enough to suggest that the forest constitutes a major resource.

If once we see that the forest is important to other resources and is important in itself as energy and as material, we can move toward its protection and perpetuation. Management must be based on the goal of sustained yield, so that the forest will be continued beyond a short span of years. Fire must be kept out, because fire destroys young trees and damages older ones. Harmful insects and disease must be eliminated insofar as possible. Grazing by domestic animals must be prevented because they trample and browse on young trees and pack the soil so that it does not support micro-organisms which are essential to tree growth.

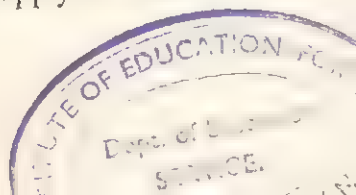
### Life in the Wild

*Wildlife is a renewable resource of wide significance for commerce and recreation. It can be held in continuing supply*

*thru maintaining proper environmental balance and regulation of "take" or harvest. Legal protection may be needed to prevent destruction of species.*

Our wildlife can exist only under conditions favorable to its growth. A balance of various species must be continued, since to destroy natural enemies of some species will usually cause an unchecked increase which strikes sharply against the limits of food supply available to the remaining species. But no species can live in an environment to which it is wholly unsuited. Food and cover must be at hand for animals and birds and fish. When we drained marshes and ponds all over the United States to increase our acreage of farm land, we destroyed nesting places and feeding grounds of ducks and then spent large sums in artificially restoring what we had taken away. We dump sewage in streams or cloud them with silt so that they cannot support sufficient vegetation to provide food for the fish. Furthermore, the annual "take" for commerce or sport should be limited by the rate of natural increase, if we have concern about the future. There are examples of the destruction of whole species, merely from greed, or sometimes even from just an excessive urge for killing.

More than for any other resource, our wildlife is protected by law and enforcement. Laws have been passed under pressure of sportsmen's groups who wish to see their sport continued. Their interest has sometimes conflicted with the use of wildlife for more utilitarian purposes. Sometimes, also, the laws passed have not been based on careful research, with the result that they may impede rather than further the cause for which they were designed. In Norris Lake, in Tennessee, careful studies proved that more fish were dying from old age than were ever caught. In view of this a closed season was lifted, many more fish were caught, but the supply continued undiminished.



## Fruits of the Mine

*Mineral resources are exhaustible and only thru wise and careful use can the supply be maintained for use.*

Mineral resources are crucial to modern civilization. All are probably exhaustible at some point in time, since they are "fund" resources. We can withdraw our stocks rapidly or slowly, but there will come a time to all of them when we have no more that is concentrated enough to mine. Long before that point is reached, we shall have skimmed off the cream of the supply, and our supplies will then be obtained only at increased cost, which will be reflected in lower levels of living. To be sure, there are some minerals, particularly the metals, which can be restored in part thru recovery of scrap. We can increase our efficiency of recovery and use of all minerals, and we can find new sources of some—as we have done with magnesium thru recovering it from sea water. But the fact remains that our modern civilization is to a large extent based on exhaustible resources whose existence has a definite limit.

There are large differences in how soon or how rapidly we shall exhaust our supplies. The most crucial are those in which use is beginning to approach the end of the "fund." Some minerals are found in such large quantities and are so widely distributed that they give little cause for present concern. Calcium in the form of limestone, aluminum in clay, magnesium in sea water and in dolomite, and silicon in sand, are so prevalent that they are virtually inexhaustible. Certain metals can be partially recovered thru scrap, and the most widely used, iron, is present in the United States in quantities sufficient for centuries, if we are willing to pay the price of increased costs. Minerals of most concern are those of limited quantity or limited distribution. Phosphorus deposits, for example, in the United States are of sufficient size to satisfy needs for years to come, but the great bulk of these deposits



are in the Far West. In the meantime we have so worked our Tennessee deposits that they are approaching exhaustion, with their life estimated to be only thirty years more. Florida is better stocked. Eventually, however, we shall have to develop the western deposits, in spite of increased transportation costs. It will be done because phosphorus is essential to plant growth.

We have, therefore, responsibility to use minerals as effectively as possible, to avoid waste and loss in extraction, to recover scrap for further use, and to substitute the more abundant for the less abundant. It is possible that national policies will be needed to protect the sources of certain important minerals already threatened with exhaustion. Production controls may be necessary for petroleum and natural gas. The welfare of society may have to supersede the right to exploit for private gain.<sup>5</sup>

<sup>5</sup> See, Renner, *op. cit.*, p. 50-53, in which he concludes that the "exhaustible, one-use resources," such as coal, petroleum, natural gas, helium, most non-metallics, and certain metals, must be treated as a separate class, to eliminate "competition in exploitation." He feels that this "probably means nothing short of the nationalization of such resources under a program of socialized control and administration for the general welfare."

Phosphate Mining in Middle Tennessee

Tennessee Valley Authority



### The Preservation of Beauty

*The natural scenic resources have great esthetic, social, recreational, and economic value. They should be protected from careless destruction.*

The scenic resources of a region provide healthful recreation, satisfying our common urge for the out-of-doors. The urge for beauty appears in the great national parks, which preserve some of the natural wonder of America. At the same time, scenic resources provide many economic opportunities, thru catering to tourists with their many needs for lodging, food, equipment, and sport. Michigan's deer, South Dakota's pheasants, Yellowstone's falls, New Mexico's caverns, New England's hills, Florida's beaches, Washington's waters, draw people from all over the United States to the benefit of the regions in which they are located. An informal check several years ago in Tennessee showed that the tourist trade at that time in that one state ranked third in the amount of income it produced, falling below only agriculture and wood products.

Again the interrelationships are significant. A well-cared-for landscape, in which each resource is considered in terms of all others, has beauty. It has order. It shows a balance among its immediate and continuing uses. It attracts visitors.

### Society Must Protect Itself

*Man is entirely dependent upon his environment for his means of life. Wise use of resources is therefore not only a matter of individual discretion. Society to protect itself may have to exercise a prior right, if resources are misused to the extent that the welfare of the human community is threatened.*

Ideally, each individual thru enlightened understanding might be expected to choose the course which was most desirable for himself and the society of which he is a part. Once he recognized the need for careful and wise use of resources,

he would guide his actions to that end, considering his own good, the good of society, and the good of generations to come. In fact, however, such an ideal can hardly be reached. Much can and must be done to inform people of the results they can expect if various choices are made. Information on the characteristics and trends of resources can be made available. Understanding of the principles of resource-use can be developed. A great deal needs to be done to assure this much.

But even if all that is done, there will undoubtedly remain those persons to whom society's or the future's good seems entirely irrelevant beside their present wish for personal gain. "Posterity?" sneered one such exploiter. "What has posterity ever done for me?" Murder has not been eliminated by knowledge that it is antisocial. On the same grounds, we cannot allow exploitation of essential national resources to remain unchecked, nor can we place our hope solely on a new generation which may act wisely and well after learning the consequences of acting otherwise. Some restriction thru law and enforcement will be needed. At what points legal restrictions on private exploitation should be placed, and where control by society may need to replace private control cannot be made once and for all. Each generation, almost each decade, must decide for itself which resources must be controlled and what restrictions must be established.

### **We Can Change Our Culture**

*A society's culture can be modified so as to permit it to be more effective in solving the problems of that society's existence. Education, advertising, science, invention, the example of respected people, and many other means effect constant change in the culture.*

If it were not possible to change the culture of a people, the expectation that resources would be better used in the future would be feeble indeed. Luckily, culture is changing



Use of Essential Soil Minerals Stops the Downward Spiral  
of Soil Fertility in One Field; in its Neighbor Gullies Continue

*Tennessee Valley Authority*

constantly as new factors enter the social environment and as new ways are found of dealing with old problems. The automobile put us on wheels, the radio brought sounds of the world into our parlor, and the airplane shrinks the globe into a day's journey. Because we can change our culture, we can hope to modify the way people act with and toward their resources, looking to the time when short-term gain will not grossly outweigh future good, and when the principles of wise use can be fully applied. At that time, we shall be able to produce a satisfactory balance between individual and social good. We have the knowledge now. We need only to make it effective in society's operation to change our methods of dealing with resources into more fruitful ways. Science will continue to discover new knowledge, new techniques, and new devices. We now have the task of finding ways to use the knowledge that is ready at hand.

In changing a culture, formal education has a large, but not an exclusive place. Schools are limited in the extent to which



they can stay in advance of the society which supports them. Without dogmatism, however, they can provide information, and transmit the proved results of experiment and experience. In so doing, they can create an opportunity of choice. Only when man knows the consequences of his action, can he make an intelligent choice between two courses of action open to him. With knowledge, he may choose a new, more satisfactory action. As that action becomes habitual, man begins to create institutions and patterns which will continue to shape his choice. Eventually, the action may become more than intellectual choice. It will be felt to be right—"in his bones." It has then become a part of a new culture.

### Man—the Key to Action

*Use of the environment to satisfy man's needs is conditioned by the resources available for use, the people who use those resources, the command of means by which they can be used; science and technology, and the ends which men believe desirable.*

Resources by themselves are nothing. They can satisfy man's needs only as he is able to transform them to his use. In early civilization man used what came to his hand pretty much as it appeared in the natural state. Later on, he began to invent and to modify, domesticating animals, learning how to control and make fire. His climb toward the complicated technology of the present began. He invented tools and techniques. He began to understand some of the laws of the environment on which he depended. As he did so, he was able to satisfy his wants with increasing ease and certainty. His wants increased, as did his numbers. Out of these many forces grew the present civilization. It is built of the elements and represents the search and struggle for materials and energy.

But uses to which man puts the environment are deter-

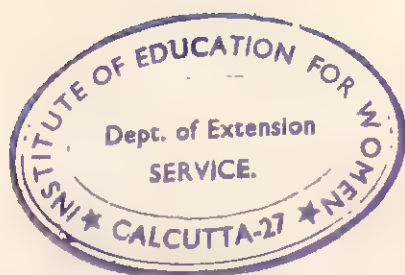
mined not alone by his skills. Even more those uses are determined by what he believes, and thinks, to be valuable. If we consider that our own generation is the ultimate value, we will have little concern for the future, even for the future of our own children. If we consider that our own individual good is the chief good, we shall attempt to accumulate wealth, or money, and therefore power clear beyond any needs of our own, largely for the purpose of satisfying our urge for dominance by controlling the destiny and lives of others. Ultimately, the wise use of resources depends upon the creed we live by, the ethics that guide our conduct, our essential sense of stewardship.<sup>6</sup>

---

<sup>6</sup> For a fuller statement of this principle see, Edward G. Olsen "Educating for Social Perspective." *NEA Journal* Vol. 31, No. 9; December 1942, p. 277-79.

. . . a free and wise society must expect the educator to point courageously at the faults from which it suffers, and to seek remedies for them.

—ROBERT ULICH



# What Are Schools Now Doing?

**M**ANY schools of the United States have reflected the growing national interest in wise use of resources. A number have incorporated in their curriculums information and ideas on the environment. The elementary school has paid increasing attention to science as the importance of understanding the environment has grown clearer. Collaboration between public agencies and schools is beginning to bear fruit.

No attempt has been made to locate all school activities thruout the United States which represent special efforts to create an understanding of resources and their use. Examples have been obtained, however, of work done in various sections of the country. They are presented as suggestions which other schools may wish to consider. They are organized to illustrate instruction pointed toward the various guiding principles of resources given in Chapter IV, even tho this method of organization leaves several blank spaces.

In general, schools seem to have directed activity on resources toward providing information on specific resources of one sort or another, rather than toward understanding of the balance of the natural environment or of the many controlling interrelationships under which the environment operates. Possibly, however, understanding of balance and interrelationships is assumed, and therefore the reports received did not reflect attention to these subjects. Furthermore, much may be going on which is considered part of community study but not thought of as instruction on resources, since the



community school, as it studies the community and exercises a direct influence on the life of the community, must concern itself with study of the resources on which that community rests. It is possible that activities of such schools were not reported because teachers had mentally classified them under a different heading than resources.

### Some Are Exhaustible

None of the examples of school practices gave sufficient attention to the need for a working classification of resources. Such a classification is essential because it points the way to a strategy of resource-use thru which the nation can preserve as well as use its base. Renner's classification is somewhat detailed, but an excellent beginning in clarifying action on resources.<sup>1</sup> The classification given in Chapter IV is simpler, and satisfactory for school purposes. That schools have not, apparently, moved to full consideration of all resources probably explains the lack of attention to classification.

### All Depend on Each

Altho the fact that no resource can be dealt with in isolation is emphasized over and over again by scientists in the field, the school practices reported for this volume seldom give the idea that those teaching about resources fully transmit what is known about the relationships among various parts of the environment. The Conservation Laboratory in Ohio, described briefly in Chapter I, does place major emphasis on these interrelationships, and some of the activities reported do also. One such program comes from Virginia, where the state has had a supervisor of conservation studies in the state department of education for several years. In the Barcroft School in Arlington, Virginia, next door to Washington, D. C., the conservation studies program includes four

<sup>1</sup> George T. Renner. *Conservation of National Resources*. New York: John Wiley and Sons, 1942, p. 49-50.

"aspects"—Pioneer Resource Use, The Soil as the Basis of Life, Conserving Our Forests, and We Need Animals. Because the school has established such a study of the various "aspects" of resources, it is able to give some idea of the interrelationships among them. The beginning study is an attempt to compare the practices and results of the pioneers with the present state and use of resources. One activity, for example, is to make a resource map of the United States as it was in the pioneer days, and then show how different it would be now.

As the study progresses thru discussion and activities on soil, forests, and animals, the interrelationships begin to come clear. Forests are studied not only in and of themselves, but for their effects on other resources. The major purpose is stated: "To appreciate the value of forests, not only for beauty but also for utility in manufacturing, and for necessity in preserving soil and wildlife." And as the study moves on to "We Need Animals," the interrelationships are further stressed. One major objective comes to be: "To develop appreciation of the interrelationship of plants, climate, soil, and water on animal life."

Several significant results were obtained from this fairly extensive study. They are listed in terms of student attitudes and actions.

1. Developed an appreciation of the services society provides for the conservation and development of natural resources in the form of government and private agencies.
2. Helped students to recognize and know some of the characteristics of a greater number of trees, plants, and animals.
3. Led to a more authentic understanding of the origin and growth processes.
4. Made clear the theories about "balances in nature" and "survival of the fittest."
5. Led to a realization of our dependence on the natural resources for the necessities and luxuries of life.
6. Gave students a feeling of "partnership" in this big business of wise resource-use.

7. Helped to develop inquiring minds.
8. Increased the use and improvement of basic skills and creative arts.
9. Developed conceptions of interrelationships between man's use of resources and his responsibility toward coming generations.
10. Provided ideas that will have a great "carry-over" value for other phases of life.
11. Encouraged intelligent discussion on the basis of facts learned rather than on "hearsay."
12. Developed initiative and many other manifestations of best use of one's own mental resources.

A rather substantial accomplishment from a well-planned study!<sup>2</sup>

### **New Balance from Old**

Many of the examples which were collected gave some attention to the general idea of replacing the balance of nature with a new balance which could continue to provide for man's needs. This was done thru investigations of soil fertility, sustained-yield forest management, marine biology, and several others. As these examples suggest, however, the idea of balance is most often discussed in connection with investigation of renewable resources. It has not been fully applied, as yet, to exhaustible resources where the need for understanding is at least equally as great.

### **Capture That Energy**

In view of the transcending importance of energy resources to modern civilization, it is odd that virtually none of the examples presented were devoted to this subject. It is possible that, again, the trouble is with words, and that few teachers consider that our energy resources are part of the broad program of conservation and development. If so, it is highly unfortunate that our thinking has been too narrow

---

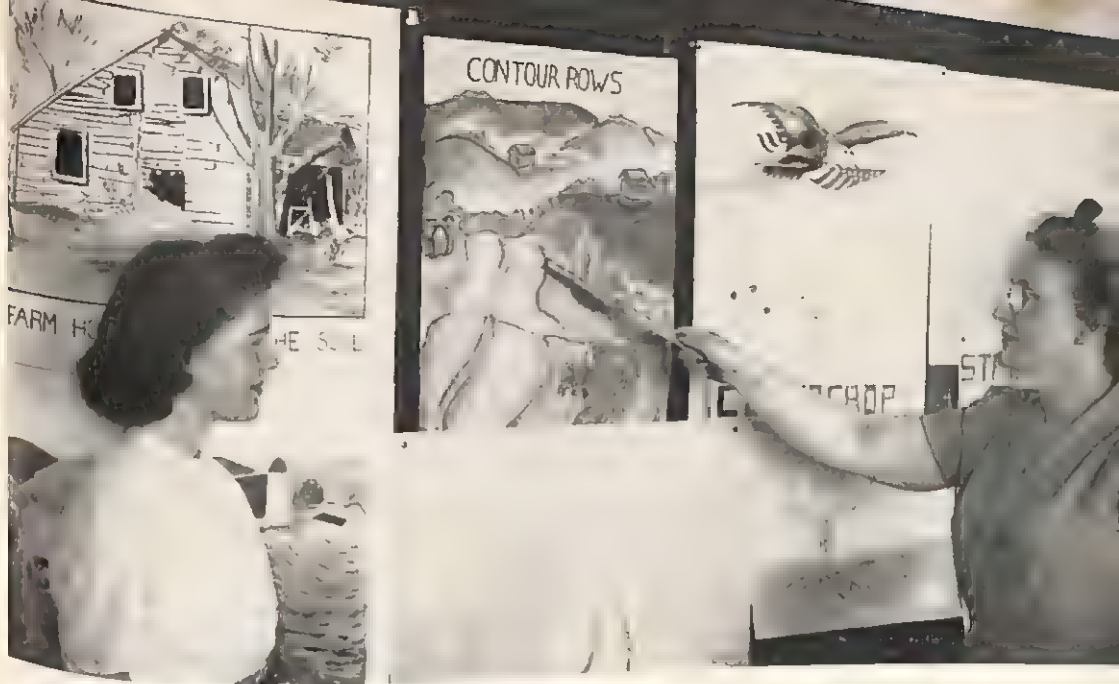
<sup>2</sup> Adapted from a report by Janice K. Campbell, Barcroft School, Arlington, Virginia.

to encompass this significant phase of our dependence on resources. We are not yet able to think of energy as something touching each of us, possibly because the development of energy resources has been placed in the hands of large organizations whose very size deters our study and action.

A report from a chemistry teacher in Superior, Wisconsin, shows some of the difficulties of making study of energy a vital part of the school program. He explains that his high-school chemistry courses have always emphasized the importance of conserving coal and petroleum products because the amounts available to man are limited. He discusses with the class earlier methods of coke production from coal, describing in detail the old beehive method. Discussion then turns to the relative importance of the products, showing how the coke is perhaps the least important, not comparing in significance with the innumerable chemical uses of coal tar and its derivatives. The class reads widely in current magazines and assigned texts, learning that petroleum also has many special uses as a raw material for solvents, medicines, and synthetics that may outweigh its present uses as a fuel, particularly if the industrial uses of nuclear energy can be developed to the point where the world is relieved from dependence on energy "funds." Graphs are used to show location and extent of coal and petroleum deposits, and to record and present information on depletion and amount of current use. Charts from the Texas Gasoline Company, the Natural Gas Company of America, General Motors, and General Electric Company are helpful in class discussions. In spite of the variety of material used, the teacher has "not seen too much of any change of attitude in most students . . . since many of the students feel that they will never be personally concerned in this particular phase of the matter."<sup>3</sup>

<sup>3</sup> Adapted from report by James Bradshaw, Superior Public Schools, Superior, Wisconsin.



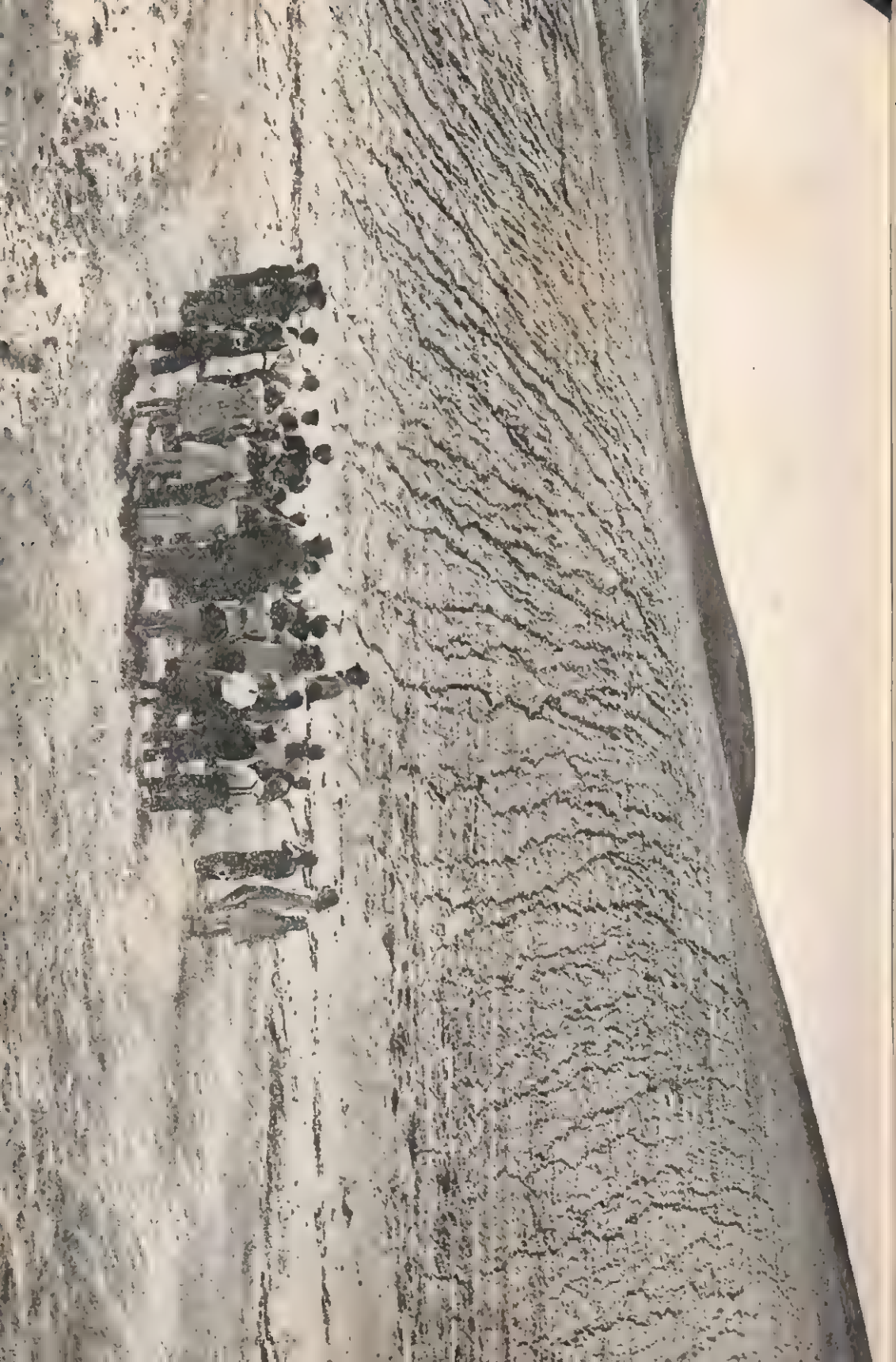


*Soil Conservation Service, U. S. Department of Agriculture*

High School Students in Greenville, South Carolina, Prepare  
Posters on Care of Soil

### **Soil, a Priceless Heritage**

Of the various resources considered in school instruction, soil seems to have received the greatest attention. Problems of land-use are prevalent thruout the United States, and are therefore close at hand for study by any school which extends its interest to the community. Widespread efforts of the Soil Conservation Service of the U. S. Department of Agriculture have dramatized the overwhelming dangers of unchecked erosion and the crucial relationship of soil to human life. The service has actively solicited the aid of schools and has been uniformly generous in providing materials, both written and visual, and the services of technical personnel to assist schools in study of soil. Agricultural extension agents are present in many counties of the United States, and the Smith-Hughes vocational agriculture teachers are available for consultation in many high schools. Thus, schools have a ready and active source of assistance. Their response is very encouraging.



## Reality for Ten-Year-Olds

Many examples could be selected. The following is taken from a newspaper account written by C. R. Stark, Jr., who titled his piece with the unfortunate catch words, "Sugar Coated Education." It describes activities in the state of Washington.

"It was one of those late fall downpours of rain in which the children arrived at school one morning. Fred could hardly wait for the class to assemble to tell them of the small streams he had observed running down the hill-sides. 'The water was muddy just like the water we saw in the movie the other day,' he explained when the opportunity came. (A few days before the children had seen the picture 'Muddy Waters,' loaned the school by the Soil Conservation Service.)

"Yes," added Elaine, "and I saw a lot of fresh black dirt on the road that the water had piled up." It was worse in that field where Mr. Blaine burned off the wheat stubble last fall, volunteered Jack. "I noticed that there are some places on the hillside in Mr. Smith's field where the wheat did not come up this fall and the rain seems to have made deep ditches in these spots," said Ray, a thoughtful boy in blue jeans. These remarks touched off an animated discussion concerning rainfall, weather, soil, seeds, summer fallow, and erosion. "This scene occurred in a class of ten-year-olds, clear-eyed, enthusiastic boys and girls from farm and village homes, gathered together in a typical American schoolroom.

"From the interest expressed by the children thru their observations and questions, the class launched on a program of study which carried them thru the entire school year in an exciting adventure. "In their search for answers concerning rainfall and its relationship to crops and the land, they pored over world and regional rainfall maps and charts. They became familiar with the relationship between annual rainfall and native vegetation. They constructed a rain gauge and kept local weather records. They identified the characteristics of their own region. In these activities, the weather bureau furnished much valuable assistance.

"When the study of soil was undertaken, the class went on a field trip, accompanied by a local geologist who pointed out the many different soil and rock formations, such as volcanic, basalt, and



sedimentary. They collected soil samples and took them back to the schoolroom for many tests. The endless questions raised on this trip concerning the age of the rocks and their weathering required much reading and careful hard study. Fossils came in for a brief study which helped the children gain proper concepts of the age of the earth.

"The class studied native and cultivated grasses. In this connection they secured samples of the native bunch grass and examined them carefully. They collected different kinds of grass seeds and carried out experiments in germination. . . .

"As the year went on farmer fathers were called in for advice. Other field trips were organized and carried out. With them on these trips went the county agricultural agent, soil experts from the soil conservation district office, and men from the United States forest service who were specialists in the problems of grazing and forestry. A committee called on the agriculture teacher of the local high school and invited him to visit their class and help answer their questions.

"Back in the classroom, facts were gathered from books in the library and from many pamphlets furnished by the soil conservation service, the state college, and other agencies. Much use was made of pictures, charts, filmstrips, film slides, and moving pictures.

"Near the end of the year the children decided to invite their parents and friends for an evening program to share with them the results of their study. Thruout the evening committees of children explained their germination experiments and their model fields showing contour plowing, terracing, and gully grading."<sup>4</sup>

The year's study described in this account is interesting for several reasons. It was built on interest expressed by the children, as they related what they had seen in films to the events of their environment. It started from fairly simple facts but rapidly grew broader to include more complex information. It used the environment of the school as the basis of the study, making field trips an integral part of the school experience. It incorporated several different kinds of learning experiences, and used the expert assistance of agencies and individuals located near the school. A very wide variety of supplement-

<sup>4</sup> C. R. Stark, Jr., "Sugar Coated Education." *The Spokesman Review*. Spokane, Wash.: June 2, 1946. Based on information supplied by Clark M. Frasier, director of the Laboratory School, Eastern Washington College of Education, Cheney, Washington.



tary reading and visual materials were employed. Finally, the work of the school was presented to the community so that its significance could have broader effect and the lessons learned could be better understood by the students thru organizing their information and presenting it to an adult group.

### *Soil for Feeding the World's Millions*

A broader study is described by Anne M. Goebel, assistant professor of education at Kansas State Teachers College, Emporia. Starting from study of the soil, the students move on, following food products thru industry, relating the need for mineral elements to the fertilizer industry, studying food and agricultural habits of various countries of the world, and many other topics.

The youngsters first study maps showing where wheat is grown in the different states and where the largest quantities are produced. This leads to questions about the reason why wheat grows where it does, and to identifying the controlling factors, such as rainfall ranging from 20 to 30 inches, a growing season five to six months long, and fertile soil covering level plains. The children search for newspaper clippings about wheat, and find such streamers as:

See Wheat Peak; Wheat Up Two Cents in Chicago  
Wheat Hits Twenty-Seven Year High; Dust Storms Responsible  
Strong Winds Bring Duster to Kansas  
Five Big Wheat Crops Changed Dust Bowl Picture  
Dwindling Supply of Kansas Wheat Left for Overseas Shipping

Not only do these headlines show how wind and rain and soil loss affect wheat, but they point to its international importance and the place the United States has to fill in fighting starvation in Europe and Asia. Wind damage is of national concern also. When soil blows in the spring, before the wheat is well rooted, the whole country shares Kansas' loss.



Pictures help the children understand some of the problems the farmer faces. Contour plowing means little unless it is seen. Pictures showing contours, strip farming, and terracing are always needed, if field trips are not possible. In describing terracing, the teacher is able to show the close relationship between soil and water, so that the children can see how water under control makes the land fruitful instead of destroying it.

Fifth- and sixth-grade boys and girls came to understand readily the need for crop rotation, summer fallowing, and the practices required for dry-land farming in the semiarid section of Kansas. One member of the sixth grade asked, for example, "But what do the farmers do when their land is resting?" He was answered by another boy who had lived in the western section of Kansas, where, the boy told, the farms were large enough to allow part to lie fallow while wheat grew on the rest.

The children were interested in experimenting with soil. A government soil expert in Emporia helped the students in simple soil experiments. They also liked to see how another resource relates to the soil, particularly in the use of trees for shelter belts to break the force of wind against the soil of the plains. They saw how these trees were planted in order to serve the soil, not to be cut for lumber as the trees of the natural forest.

They also discovered how minerals make large wheat production possible thru the use of machinery moved by stored supplies of energy—either gasoline or Diesel oil. Iron ore is mixed with limestone (calcium) and heated by coal. The pig iron is transformed into steel, and made into tractors, plows, and other implements fairly near the wheat belt itself. The mineral elements join soil, water, sunshine, and human ingenuity in satisfying human needs.<sup>5</sup>

<sup>5</sup> Adapted from a report by Anne M. Goebel, assistant professor of education, Kansas State Teachers College, Emporia.

*Water in the Creek All Summer*

The Vine Grove, Kentucky, High School demonstrated to its community the close relationship between soil and water. Among visitors to the school one day was R. E. Jagers of the Kentucky State Department of Education. He was so impressed by the activity of the school that on his return to Frankfort he used one of his community school circulars to schools of the state to tell the story of what he saw.

"'There was water in the creek all summer this year for the first time in several years.' This was said by James T. Alton, principal of the Vine Grove School, in a conversation with a group of visitors who had spent the preceding day in and about the school. 'So what?,' we all thought, and he continued the story. The return of the waters in the little creek which had been dry for several summers appeared to be just one of those things which just happen in the mystery of nature.

"It was a miracle in fact, but not a miracle brought about by mystery. It was a miracle—a miracle of knowledge, of education, of understanding—a miracle of faith in the good earth's kindness if it is understood, and if we cooperate with it. It was a miracle which removed a curse—a lowering of the earth's water pan where men had stripped the earth until it had become so barren that the rain water would not (could not) remain on its surface long enough that



Rural Boys and Girls Study  
the Relation of Water and  
Soil to Their Everyday Lives

Soil Conservation Service,  
U. S. Department of Agriculture.



it could 'soak in' and maintain the water pan. It was the miracle of restoring the soil so it would grow vegetation—it could (and did) grow cover crops. It was the miracle of getting something in the soil that would delay the rain water long enough for it to sink into the earth.

"Who was responsible for the miracle? It was the principal who loved the land—understood it; and who worked with soil conservation agencies in restoring the soil. He knew how it had been robbed; knew why the stream had dried up; knew what would restore its life, and took steps to restore it. He knew that to restore the soil would give it life to grow food and at the same time the restored soil would restore the stream. Eleven years it took to produce the miracle. It was done without fanfare—just did it. How? He helped build the soil."

As teachers and principals over Kentucky read this account, they naturally turned to Mr. Alton, to ask how he had done it. His answer was that it came thru a total community program of education which used all aids available and called on the help of all agencies. Vocational agriculture, including evening school, part-time school, and day classes of the boys in vocational agriculture; the Soil Conservation Service; the Agricultural Extension Service of the University of Kentucky; the AAA; and the CCC—all contributed, and all became part of a total program of land improvement which emphasized the use of phosphates, which were purchased, and the use of lime, which was available in the community. After the two elements of phosphorus and calcium had been added to the soil, the program emphasized growing legumes (to hold soil and add nitrogen), growing cover crops, planting trees (thousands were planted in the community), terracing the land, planting strip crops, avoiding the burning of fields, and pasturing rolling land instead of cultivating it. These were steps which produced the miracle of having water during the long hot summer months in the little Otter Creek, the natural boundary on two sides of the Vine Grove Community.

Water in the creek may be unimportant in itself. But it reflected improvement in the community. The things which

"The statewide fight against the disgusting and dangerous pollution of Vermont's surface waters has enlisted the aid of the school. Students of Springfield High School have entered the fight against further defilement of lakes and streams in their territory, and are really getting somewhere.

"In the spring of 1946 our school physician, Dr. F. Elmer Johnson, proposed that the biology department (by way of gaining an understanding of health problems) conduct a survey of Springfield's primitive sewage disposal system. Plans were laid during the summer, and out of a hundred students who enrolled in the department in the fall, forty-five signed up with the Stream Pollution Committee. This body took, as a project, investigation and consideration of the situation in the waters of the Black River Basin.

"Their first duty was to inform themselves fully of the problem. To do this, they assembled all the information they could from the public library, the school library, the town office, textbooks, and such sources. The teacher told all he thought they could use, and suggested activities he thought they could carry out.

"So far, the activities have taken the form of surveys and propaganda. The main impact of the latter has been on the student body, but the public is expected to be exposed. Map enlargements of the territory were made, and teams were assigned sectors in which to work. These teams recorded on their maps every source of pollution they could find along the ten miles of the Black River and several more miles of Chester Brook, Valley Brook, Clark's Brook, and several smaller streams and ponds, in country both thickly and thinly settled. Note was taken of open sewers, dumps, dead animals, barn-yards, industrial waste, garbage, etc. Twenty-four samples for bacteriological analysis were taken at strategic points. These were sent to the state laboratory, as we have no incubator and it was thought well to acquaint the students with the resources at their disposal. The results, transposed to the maps, indicate the seriousness of the various forms of pollution. Thru this, we have shown that there is a real need for a clean-up of our streams that will probably involve a disposal plant for the village and a program of installing septic tanks for the country.

"Other students have utilized the services of the art department. They have made lurid posters depicting the evil, and have arranged bulletin boards with these posters and the equally colorful handouts of the state chamber of commerce. Thus, they have acquainted the

Not all streams dry up. Some continue to flow, but are called upon to carry an increasing amount of filth from our cities. In Springfield, Vermont, an attack is being made on this well-nigh universal problem, says a biology teacher.

*Some Streams Continue To Flow*

From the former welter of disconnected effort, toward common ends so that a single, direct program emerges various agencies work according to their special competencies; agencies and individuals identify needs and adopt goals looking forward to community improvement; and finally the working relationship under the stimulus of some one of them; diverse agencies of the community are drawn into an effective that the school has meaning in the life of the community; many school activities on use of resources. There is the concern with a community problem, based on the conviction that the school activities are drawn into an effective working relationship under the stimulus of some one of them; agencies and individuals identify needs and adopt goals looking forward to community improvement; and finally the various agencies work according to their special competencies toward common ends so that a single, direct program emerges from the former welter of disconnected effort.

This description shows some of the factors which run thru many school activities on use of resources. There is the concern with a community problem, based on the conviction that the school has meaning in the life of the community; diverse agencies of the community are drawn into an effective working relationship under the stimulus of some one of them; agencies and individuals identify needs and adopt goals looking forward to community improvement; and finally the various agencies work according to their special competencies toward common ends so that a single, direct program emerges from the former welter of disconnected effort.

were good for the little creek were the very things which were good for the soil and good for the people.<sup>7</sup>

Water Stands Still in Contoured Furrows on This Oklahoma Farm

Soil Conservation Service, U. S. Department of Agriculture



rest of the student body with the problem, and have confirmed it for themselves.

"We have shown a movie on water purification in the classroom, following the excellent visual aid suggestions put forth in the *Journal* last year. Filmstrips are available, and will be shown. Scrapbooks are being made. Essays are being written. Press relations are being established. And all of this is being done by the Stream Pollution Committee in addition to their regular biology work.

"In projects like this, certain values accrue to both school and community. The students not only feel, but put into active expression, responsibilities to the community that they will not lose before becoming voters. The community is pleased to see the students taking an active interest in what has become a live issue here. The engineering firm engaged by the village to make a survey has welcomed our cooperation. Thus, we feel that we are accomplishing something worthwhile, and that is a valuable psychological impetus in high-school education."<sup>8</sup>

### Forests No Longer Primeval

Interest of schools in trees is of fairly long standing, partly at least because national conservation efforts have been operating on preservation of forests longer than on many other resources. Altho the school forest has a history of considerable length, its use seems to be expanding rapidly now that trees are dwindling with alarming speed. The state of Virginia, for example, has undertaken a joint program between the state forester and the state board of education under which a school forest will be established at each of the vocational high schools in the state. Landowners in the vicinity of the schools will give plots, and the schools will manage and maintain the forests. In Tennessee, a large lumber company established sustained-yield practices on its 90,000 acres of forest land so that its cut of trees would not exceed the rate of growth, and the more valuable growth would be encouraged.

<sup>8</sup> John C. Pierce. "Stream Pollution Project." *Vermont School Journal*. March 1947. p. 13.





But it didn't stop there. The high school at Waynesboro set up a 34-acre school forest, given to it by the same lumber company. On this miniature tract the children coming thru the school will learn the practices which have been found scientifically and economically sound in commercial operation.

### *Fire Remains a Major Problem*

Another type of teaching device adopted by some schools has been the fire-damage-demonstration plot. Woods burning still take a terrific and unnecessary toll of the trees of the United States. In many sections, fire remains the number one forest problem. Most of the fires are caused by carelessness; some perhaps by lack of information on what damage fire does to the trees thru destruction of young growth and the humus of the forest floor. The fire-damage-demonstration plots show the extent and significance of fire damage. A school obtains an acre of trees, whose two halves are closely similar in density and type of growth. Usually a local landowner donates the acre. A forester checks the growth to make sure that the two halves are similar, and then once a year, under a forester's supervision, one half of the acre is burned. Measurements are made each year to show the loss of growth and the plots are studied carefully to identify other effects of fire. It doesn't take long for the lesson to be made plain. As one landowner put it when asked to give an acre of trees for a demonstration plot: "Sure, you can have it. It took me thirty years to find out what damage fire did to trees. It shouldn't have to take my children that long."

Some schools have reforested cut over sections to pin down the significance of trees in community life. In the January 1947, issue of the *Washington Education Association Journal*, Frank Jones Clark of Alderwood Manor, Washington, describes activities of Washington schools in this field.

*An Outdoor Laboratory in Michigan*

But the most interesting example presented for this volume comes from Michigan, where the Muskegon Senior High School has used a school forest over the past six years. Preparation of a report for this yearbook was the occasion of summarizing and evaluating the experience.

In 1940 the Muskegon Senior High School acquired 120 acres of tax-delinquent land, thirteen miles from the campus for a reforestation program. The biology department welcomed the windfall of an outdoor laboratory and assumed responsibility for the program, entering into a cooperative agreement with the South Muskegon Soil Conservation District which furnished the land-use plan and technical assistance.

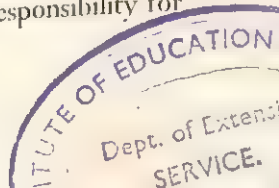
The original tract has been increased to 200 acres, most of it scrub oak. It records results of the usual Michigan history of lumbering of hardwoods, then pines, probably followed by a charcoal producing period, and then the discouraging attempt at farming—the lical bush and cellar hole are mute reminders—ending with sheet and gully erosion and the beginnings of a sand blow. A short stretch of Mosquito Creek presents a future project in stream improvement, and the bottom-land woods are rich in resources for biological study.

This report is a summary of the first six years' activity with the tract in an attempt to determine whether such a program of outdoor education holds valid learnings for city high-school students. Does it give meaning to classroom discussion on resources to the end that attitudes of thinking will carry over into the adult lives of the participants?

With the exception of our farm plan which determined our tree planting activities, the rest of our program has just grown as ideas and opportunities presented themselves. We know we have done nothing unique or unusual. This story is being repeated by many city, village, and rural schools.

For three years the program was entirely extracurricular, meaning that the work was carried on during summer vacations, after school, and on Saturday. It has continued to be extracurricular except for four afternoons a year.

Most of the participants are biology students working out 20-hour projects. The Conservation Club, however, assumes responsibility for



all forest activities and financing. The club, started because of the acquisition of the tract, maintains a yearly membership of about sixty students. About one-third are juniors and seniors who have maintained their interest since their earlier days in the department.

Biology instructors provide supervision with occasional assistance from the principal, assistant principal, and several other men on the faculty. The Soil Conservation District furnishes the technical assistance.

#### ACTIVITIES

Before beginning this summary we were depressed by the feeling that we had touched the lives of very few students with this activity. We have been pleasantly surprised by our own figures for the six years and dream about the possibilities if we could find more adequate transportation and build a more flexible school program. The variety of activities and learnings point up the possibilities of integration of many classes and the desirability of making such a project more than a biology department activity.

1. Tree planting—about one hundred and twenty students per year. One hundred and twenty thousand trees to date; Jack red, white, and Scotch pine. A few European larch; Douglas firs, and northern spruce.
2. Fire-land clearing—about four Saturdays per year with perhaps twenty students in each crew. The Conservation Department has assisted with fire-lane plowing and before the war we could hire near-by farmers to plow.
3. Tree cruising—once, two students with forester.
4. Tree felling, mature poplars—crews limited to six students with a student chairman go out at their leisure. This is usually a Saturday activity. The forester from the Soil Conservation District accompanied us once for instruction in tree felling and care of tools.
5. Sale negotiations for the poplar—one student.
6. Christmas trees, plantation thinning—four trips, twenty students.
7. Tree sales—ten students.
8. Advertising, price setting, selling arrangements, mailing statements, balancing books—committee of six students.
9. Insect control, cutting out pine weevil, spraying and shaking for sawfly larvae, burning for bark borers—summer work, fifteen students.



10. Nursery work—ten students. Our trees are supplied by the local nursery of the Soil Conservation District.
11. Fire fighting.
  - a. Series of six lessons with State Conservation Officer—twenty-five students.
  - b. Volunteer fighters, actual experience—about one hundred students in three years. Originally this activity was limited to boys, but girls proved such valiant fire-fighters in an emergency that they are now signed up as a matter of course. The club sends out a call for fire-fighters in September. Any boy in school sixteen years of age may sign up, and any girl in the Conservation Club. A twenty-four-hour schedule of the volunteers is kept in the school office and at the home of two instructors. This is the only activity as yet which may disrupt the school schedule. We have put one hundred students in the field within forty-five minutes after the call for help came from the Conservation Department.
  - c. Yearly demonstration of fire-fighting equipment.
  - d. We have taken several trips thru the Manistee Forest and visited the Roscommon Fire Experiment Station. Private cars are usually used for such trips with fifty or sixty students and several faculty members.
12. Soils tour of the county with soils district men—twice a year, thirty to sixty students on each trip. We make an 80-mile swing around the southeastern portion of the county, comparing our own farm with other soil areas and learning to appreciate the economic and social relationship of soil and men.
13. Use of the forest in biology class study of conservation—three hundred students per year but only one-third of them actually see the farm.
  - a. Making a land-use plan.
  - b. History of lumbering in Michigan.
  - c. Study of soils and erosion control.
  - d. Biological principles such as balance of nature, plant and animal relationships, plant succession.
14. Surveys.
  - a. Animals, by winter tracking—twenty-five students.
  - b. Plants, weekly after school trips one spring—committee of five students.
15. Trail blazing—ten students.

16. Improvement of recreation site—six students on their own time and without supervision have erected signs, built a fireplace and parking area, and driven a well. Fifteen students have built paths and bridges. Two students have sent water samples to Lansing.
17. Use for recreation.
  - a. Hunting and fishing—no record has been kept of the participants but we find much evidence that our area is popular with the trout fisherman and the deer hunter. Of course, the first concern was whether or not we should close the area for a sanctuary. A club committee met with the state conservation men to learn about sanctuaries and why our area should remain open for hunting and recreation.
  - b. Camping—boys, frequently. Boys and girls, supervised—ten students.
  - c. Picnic suppers follow each work bee. Learnings involved thru recreation—fire building in all weathers, grounds care, latrines of temporary construction.
  - d. A camping committee is making a study of camping techniques both for use "on location" and for our roving trips which occur three or four times yearly to such places as the Bernard Baker and Kellogg Bird Sanctuaries and to the State Audubon camp-outs.

In conclusion, how can one evaluate the worth of such a program? Of course, even if these school forests should happen to represent but a passing fad, the state will be the richer by several thousand acres of improved land. But the real value of such education must be in its carry-over to our adult population. Will these city students carry into adulthood a greater appreciation of the importance of conserving soil, water, forests, wildlife? Will they continue to feel at home in the out-of-doors? These are the great intangibles. Who shall measure them?

I do know that veterans home from the war go out to see how "their trees" are doing. Graduates return to help in the project. Students take their families on Sunday afternoons to see "our farm."

Outdoor education, like any laboratory education, is expensive. Yet, one doesn't become an expert typist by reading about typewriters. Nor does one learn the real value of conservation of these—our natural resources—by merely studying them from a book in the classroom.

The school forest is a laboratory which will be partially self-supporting in a few years' time. The two points at which we need administrative assistance are in providing transportation and a more flexible school program for greater student participation.

As for teacher supervision, missionary-spirited pioneers have carried the load to date just because of the fun there is in bringing the enjoyment of the out-of-doors to young people. Perhaps there always will be enough of these folks to carry on in the years ahead.<sup>9</sup>

### Life in the Wild

Most school children learn something about the wildlife of the United States if only from their history books and the study of Indians. Some schools, however, have made it possible for their students to see wildlife in its relationship to human life and to the other factors of the environment. Often the relationships are lost because the study is broken down into separate courses. A Virginia girl studied birds for some months in a conservation unit in eighth-grade science. She felt a real lack, however, for she commented: "Now we've learned all there is about the outside of the birds. I can't wait to study biology and find out what's on the inside." Interest in wildlife has been one of the early forces in conservation, so much so that the word "conservation" too often calls to mind sportsman groups whose interest lies in preserving enough pheasants or quail or rabbits to make hunting worthwhile. This is probably inevitable since many state conservation departments are supported from sale of hunting and fishing licenses.

The Raymond, Washington, High School has used part of a biology course to study the wildlife of that state. Soil, water, and plants are studied so that the ecology of the wildlife community can be understood. The class uses visual materials and field trips to make the study vivid. Conservation

<sup>9</sup> Written by Verne A. Fuller, Muskegon High School, Muskegon, Michigan. Submitted by W. C. Ryder, consultant, Conservation Education, Michigan State Department of Public Instruction.

specialists talk with the class. The students come to know the various public and private agencies which are working in the field, and what their various functions are. The course outline gives an idea of the content and the methods used.

WILDLIFE CONSERVATION AS TAUGHT IN BIOLOGY CLASSES  
RAYMOND HIGH SCHOOL

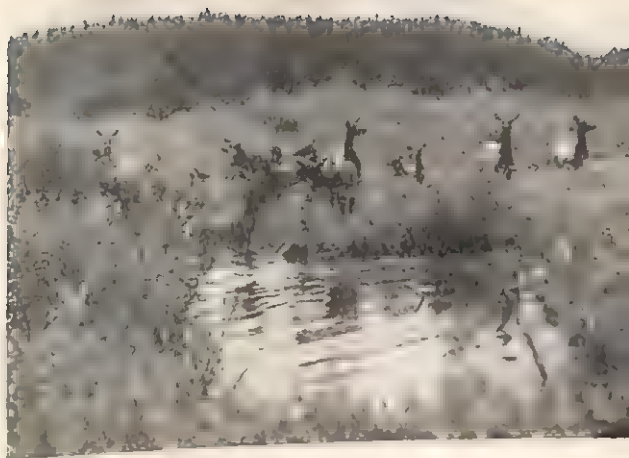
1946-47

- I. Introduction to Problems
  - A. Sound films, *A Heritage We Guard* and *Realm of the Wild*
  - B. The history of the bison and passenger pigeon
  - C. Discussion of need of conservation as evidenced by A and B
- II. Study of Conservation Agencies
  - A. Services of agency—extent, authority, etc.
  - B. Nearest agency office
- III. Upland Game. (Note: Students select bird of their choice for reports. Study to begin near opening of season.)
  - A. Pictures—male, female, and young
  - B. Description
    1. Field marks
    2. In the air
    3. On the ground
    4. Voice
  - C. Life History
    1. Range—over North America and Washington
    2. Breeding and nesting habits
    3. Food
    4. Chief enemies
    5. Abundance or scarcity
  - D. Interesting activities or habits in the life of the bird
  - E. Regulations governing hunting, propagation, etc.
- IV. Migratory Waterfowl. (Note: Same plan as for upland game. Outline will vary slightly to fit waterfowl.)
- V. Mammals of Washington. (Reports and discussions covering.)
  - A. Game Mammals:
    1. Range
    2. Habitat
    3. Feeding habits



Band of Elk Drinking at a Beaver Pond  
in Teton National Forest

*U. S. Forest Service*



4. Breeding habits: (a) behavior, (b) time of mating, and (c) number of young and time of birth.
5. General habit of adults: (a) antlers, (b) hibernation, (c) travel, and (d) acts demonstrative of intelligence.
6. Hunting regulations

B. Predators. (Note: Student reports on life history.)

C. Fur bearers. (Note: Student reports on life history.)

VI. A Student Constructed "Code of Sportsmanship"

VII. A Student Constructed "Code of Safety"

VIII. Wildlife Scrapbooks. (Note: At students option.)

IX. Fish To Be Studied in the Spring.

Comments: A great deal of discussion resulted from the above study. Many boys that otherwise were silent found a field for expression of ideas. Fifty-five students in Raymond High School are now more conservation minded and appreciative of wildlife of Washington than they were September 1, 1946. Any biology class can adjust their year's course to include the above outlined study. The course will be enriched; the students enlightened.<sup>10</sup>

### Fruits of the Mine

Probably a number of schools provide information on minerals and their place in the economy. Geography teachers

<sup>10</sup> Adapted from report by Lloyd Flem, principal, Raymond, Washington, High School.

often devote attention to the location of mineral sources and to the industrial products of the various states. Only a small number of the reports of school practices dealing with resources focused their attention on minerals, however. This seems to be typical. Our attention has been drawn more frequently to problems of the renewable and inexhaustible resources, such as land and water, than it has to our exhaustible resources, such as oil and gas. It is the latter, however, which are most critical to continued civilization. They are the ones, it will be remembered, which George Renner feels must be protected in many cases either by regulation or by public ownership.

### *Social Problems under Consideration*

An excellent account of a unit on minerals appeared in *The Changing Curriculum*, prepared by the Joint Committee on Curriculum of the Department of Supervisors and Directors of Instruction and the Society for Curriculum Study. As an illustration of curriculum practices, it presented a unit on "Mines, Minerals, and Mining," undertaken by the sixth grade of the Ohio State University Elementary School. It is repeated here to represent a study of resources that not only related one resource to another, but pushed ahead to the significant social problems clustering around the development and use of the various resources.

"Most of the children in this group had been in the school from two to five years, so they began immediately [after summer vacation] to talk about a 'study.' After several days of discussion they concentrated on seven areas of interests as follows: life under the sea; scientific instruments: how they are made and used; iron and its uses ('I saw the Mesabi Mines this summer'); Europe, especially Italy; manufacturing in our country; minerals ('not just iron'); plays or drama; puppets, marionettes, stage, movie.

"Next they developed the following set of criteria for choosing the unit:

1. It should be interesting enough to work on for a long time
2. It should be harder than last year's, and it should be different from last year's
3. It should be about something we can get many books on
4. It should be about something we can get help from trips, people, letters, movies
5. It should be something for which we can have interesting and worthwhile things to do in work period
6. It should be worthwhile.
  - a. Help us to understand and work with people
  - b. Help us to understand and be able to talk with people
  - c. Help us to know what grown-ups with experience think is important
  - d. Help us if there is something we are not so good in.

"At the same time these children listed studies of former years in order to make sure that the proposed study would be more difficult and would insure new types of experience.

"Discussion under the guidance of the teacher proved that the group had not sufficient information on these several interests to make an intelligent choice. Therefore, they started purposeful research as they attacked the problem of exploring and investigating the possibilities of their several suggestions. As research continued, the scope of the various suggestions changed. For example, mining the scope of the various suggestions changed. For example, mining soon bore the label, 'Mines, Mining, and Minerals,' so that it would incorporate all minerals most important to men, and working and labor conditions and problems. The group had found in their exploratory reading that child labor, the Guffey Coal Bill, and dangers in mining were aspects of the problem. Exciting stories of the discovery of minerals and the dangers in mines also appealed to many children. At the end of three weeks when the group considered themselves sufficiently informed to make an intelligent choice, they selected 'Mines, Mining, and Minerals.'

"The plans were then sent to the faculty staff. The teacher was asked to point out to the staff how the proposed study met the criteria set up by the group and to explain that such a study would probably take the entire year, but that the class thought it would be worth that amount of time.

"The staff members felt that this group had thought thru their problem and had met criteria to such an extent that they concurred in the choice of the children.

"The unit thus approved, the group immediately listed these minerals as a beginning: iron, coal, petroleum, marble, limestone, tin, copper, gold, silver. Later they made many additions to this list. They agreed to start with a study of coal and listed eighteen questions as a point of departure. Here are several typical questions: 'When, where, how, by whom was coal found?' 'Is coal a metal?' 'How are metals distinguished from other minerals?' 'How do scientists locate coal and tell where resources are?' 'What are miners' wages? Their expenses?' 'What are the dangers in coal mines?' 'What laws govern coal mining and coal miners' hours and working conditions?'

"As the children read more widely and had other experiences, many more questions arose. Likewise, as the work progressed, the children realized the desirability of reorganizing their questions.

"The group started a mineral collection and found they needed exhibit shelves. Two boys became responsible for planning and making the shelves. Soon every one, either individually or as a member of a small group, had decided upon some undertaking which would contribute to the development of the large unit. These individual and small group plans were approved by the entire class before they were undertaken.

"As research and discussion continued, other construction activities were undertaken. These included the making of booklets, on 'Child Labor,' 'Our Mineral Friends,' and other topics; sets of oil paintings showing various aspects of the study; puppets and an original play to show the story of a coal miner's life; large maps showing the location of metallic minerals, of non-metallic minerals, and of the chief industrial cities in our own country which grew up as a result of mining, refining, or manufacturing.

"As they went about finding, interpreting, and organizing their information and executing their plans, many subjectmatter areas became necessary as integral factors in the daily experiences.

"A few illustrations of the many needs which called for the utilization of various areas of learning experience will suffice to show how subjectmatter areas become integral parts of the learning experience. The children consulted numerous books besides many periodicals, newspapers, and advertising literature. They wrote eighty-seven letters for material and information, many notes of appreciation to those who had helped them, accounts of various helpful trips, experiments, and movies. The study also stimulated the writing of poems and stories.



"The arts were indispensable to the building of exhibit shelves, the making of maps, friezes, oil paintings, and booklets. Science experiments such as plating copper; finding out what rust is; testing to find out whether they had aluminum, lead, or tin foil; and changing coal tar to a dye base helped to clarify their concepts.

"The function of the spécial teacher in this situation needs a word of explanation here. When the arts or science became indispensable either in working out group plans or in the experimental solution of problems, the specialist joins the group and guides such work.

"Health and hygiene became significant when the children found that minerals existed in foods and were necessary to the body. The real values of sunshine and fresh air took on new meaning when they had investigated the effects of mine gases; the dangers of working in damp, dark, dusty coal mines, with dusty lime crushers, or in the great heat of steel mills.

"There was a constant need for mathematical computation as children needed to interpret quantities produced, consumed, or wasted, and to find out whether the minerals were measured by the ton, the barrel, or by the fractional parts of an ounce, as radium is measured; to interpret graphs and tables; to read temperatures. There was constant need for many kinds of computation as the children carried out their various undertakings. Likewise only thru mathematical computation could they understand how recently in the world's history many minerals had become important, and data thus arrived at in turn helped the children to realize how rapid is our consumption and the real need for conservation. In much the same way such important concepts were developed as those of quantity, quality, monetary and utilitarian values, and the effect of supply and demand upon prices.

"As the children made maps on which they located areas where the minerals had been discovered, where they are mined, where untouched resources exist, where and why industries have grown up, they were learning more than place geography; they were realizing the interdependence of different working groups and of different nations. The children were equally interested to learn that often conquest, exploration, settlement, and territorial expansion were brought about because of some mineral resources.

"As they investigated incomes, expenses, living conditions of miners and mill and factory workers and compared them with incomes of persons whom they knew, they became interested in work-

them with picnic leftovers. We litter public campgrounds, tourist courts, and public bathing beaches. We have even made an onslaught on our beautiful national parks.

"Our engineers build fine, new highways, and then we let a few opportunistic move in and create roadside eyecores consisting of garish filling stations, billboards, unsightly garages, flimsy shacks, 'hotdog' stands, auto wrecking yards, used-car lots, and tourist cabins."

"What can we do about it? In 1935 the Supreme Court of Alaska-

chussets decided that a highway location has no value for such establishments before the highway is built, and that therefore the present value of such a location belongs to those who have built and used that highway. This decision confirmed the right of society to regulate, and even exclude nuisances from the roadside. Legally, therefore, we do not have to endure these things if we do not wish to.

men's compensation, social-security measures, unemployment insurance, and other current social issues.

"Finally, as a culmination of this study, the group planned to share their information with others. First, they worked out a series of dramatic sketches for what they called a 'News of the Century' program using the school radio for the voice of the commentator. This was followed by an exhibit."<sup>11</sup>

The significance of this study to children living in an industrial world is very great. The careful planning, in which the children participated, the steady progress of the study into broader fields of human interest, the use of "various areas of learning experience," all give valuable suggestions for study of resources.

### The Preservation of Beauty

None of the examples submitted described school activities to increase understanding of the economic value of scenic resources of the United States. Perhaps teachers have not considered scenic beauty as a resource, in spite of its growing economic value. A great number of schools have conducted in making the school ground more attractive carry over to the homes and the community of the children. These efforts are well known, and it is hardly necessary to provide illustrations. The need for attention is clear, however. Renner and Hartley have this to say:

"We Americans seem bent on continually adding more ugliness to the ugliness we have already created. We set fire to brush and grassland, and burn over nearly all vacant lots, groves, and marshes each year. We dump old cans, wrecked autos, and other rubbish in gullies, in ditches, along roadsides, by bridges, in creeks and ponds, and on vacant lots. We camp along streams and roads, leaving disorderly messes of bottles, papers, pie plates, cans, and straw. We invade the farmer's private groves and pastures, and impudently litter

"Five billion dollars, it is estimated, is spent each year on tourist travel. Tourism is becoming our greatest industry. When people go traveling, they naturally wish to go by way of the most attractive route, to halt and spend their money at the cleanest and neatest places, and to visit the most beautiful recreation areas. Disfigured highways and unsightly communities are avoided if possible. Scenery and community beauty thus have a direct cash value, and to neglect or destroy them is unprofitable. The loveliness of a blossom-fringed country road is a natural resource not uncommon in the United States.

"A large part of the trouble is lack of education, and in some instances the wrong kind of education. The art work in public schools, for example, is based on the assumption that the school's task is to train artists, tho only a few children have enough artistic talent to profit by such training. Every child, however, can be taught at least to understand and recognize beauty, and how to create it in a way that will be satisfying to him as an individual in a workaday society.

"One of the first lessons the school child can learn is civic pride—pride in his city, village, or countryside. After this lesson is learned, the normal child can easily be shown how to develop talents in creating beautiful things for himself, his home, and his community. When he becomes an adult he will see to it that some of his community's efforts are directed toward creating the kind of locality which will excite civic pride. The development of the esthetic sense in our people has been too long neglected."<sup>12</sup>

### Society Must Protect Itself

To some degree, preservation of beauty and wise use of all resources may require that society exercise its rights thru planning and possibly control restraining individualistic and selfish use of the environment. Schools are responding to this conclusion by studying the various phases of community life and emphasizing needs for group action which gathers up the individual impulses voluntarily into plans which more nearly satisfy needs of the group as a whole.<sup>13</sup> Undoubtedly,

<sup>12</sup> George T. Renner and W. H. Hartley, *Conservation and Citizenship*, Boston: D. A. Heath and Company, 1930, p. 301-305.

<sup>13</sup> See, *Group Planning in Education*, 1945 Yearbook, Department of Supervision and Curriculum Development, particularly "Education for Social Intelligence," by Howard A. Lane, p. 2-11.



such progress will at times inject the school program into controversial subjects, since it will find that it must deal with how society is organized and controlled. "Certainly," as Charles Judd said, "there is no justification for evading controversial issues when they arise: Not only is objective, scientific treatment of disagreements possible, but it is the safest preparation of young people for life in the community. If there can ever be cultivated in American society a willingness to deal with social issues on the basis of rational understanding rather than emotional excitement, the highest purpose of education will have been served."<sup>14</sup>

### We Can Change Our Culture

As the influence of the school has been extended until it reaches virtually all American youth, the school has expanded from an almost exclusive concern with the culture of the past to an increasing concern with shaping and modifying that culture to satisfy needs of society's members more effectively. Community study and exploration have real meaning as the school begins to participate actively in the moving community life, becoming itself an agency of social change. The new curriculum then comes to have an immediate effect on the way people live, and think, and act, in other words, on the kind of culture they create and maintain. The 1944 year-book of the Department of Supervision and Curriculum Development, *Toward a New Curriculum*, stated this clearly in defining the task of the future:

"It seems clear that a restricted concept of what education is and how its functions are to be served will not suffice as schools move toward a new curriculum. . . . Curriculum policies and plans growing out of such a concept will be formulated with reference to the needs and problems of society and of individuals. The curriculum will be

<sup>14</sup> Charles H. Judd. *Education and Social Progress*. New York: Harcourt, Brace and Company, 1934. p. 228

focused upon the culture—its values, its conflicts, and its potentialities. The competencies required of the individual as a personality and as a member of social groups will be developed. As educational opportunities are extended, education will make a difference in the realities of everyday community living."

### *A Community and Its Children Learn Together*

Many schools have affected the culture of their communities by redirecting established ways of using resources. An illustration from a one-room school in Breathitt County, Kentucky, will be ample. It was written by the teacher, Bertha Watts.

"Many a one-room school is a drab place to which children grudgingly come for a smattering of the three R's. It need not be. It can join hands with the home in helping the whole child grow in skills and knowledge, in understanding, and in aspiration. It can join hands with the community so that the entire environment becomes a laboratory for exploring young minds, and the school a contributor to community betterment.

"Our school is an isolated one-room school in beautiful hill country. We wanted it to be as homelike and beautiful as possible. Our older girls from the intermediate grades made colorful drapes as a home project and arranged them so as to shut out no light. Homes in the community contributed a mirror, a dressing table, a few pictures, and flowers in season.

"Pupil committees saw that the room was kept in order and floors cleaned, that water was kept in the cooler, that both toilets were kept clean, and that the playground was free from rubbish. The committee on flowers arranged the cut flowers and took care of the growing ones which were sent from the homes in our community. Every child in school served on some committee every day.

"We studied our community to learn its resources, industries, means of transportation, medical facilities, and kinds of recreation. We learned what we could about the size and furnishings of homes, the education and occupation of parents, the number of children in families, and other factors. Children were observed closely to note health, nutrition, social and emotional adjustment, and interests.

"Many things started in the classroom or on the school grounds

spread to homes and beyond. Our school grounds provided good object lessons in erosion, beautification, and sanitation. We filled the gullies, set out trees and shrubbery, and screened the toilets. The lessons learned were carried home. Since there was much coal mined and sold in the community, we took as many arithmetic class periods as were necessary in teaching the upper grades how to gauge a sled or wagon for coal. They learned how to measure acres of ground, to find out how much corn is in the crib, or to estimate the number of bushels of shelled corn grown on the farm while it is in the ear.

"The farm was one of our projects in social studies. Children learned what to cultivate, what to pasture, what to leave in woodland, and reasons for these decisions. Parents learned from their children the value of cover crops, how to care for pastures, methods of preventing erosion, and numerous other things. Children learned the best breeds of chickens for eggs, for meat, and both. They looked into the question of the types of hogs best suited for various purposes.

"The garden project helped the school-lunch program. In time it affected the standards of gardening in the community and led to more careful selection of garden sites and better practices in harvesting and storing produce. The pupils learned more by practice than from books. They learned the enemies and friends of the garden, how to control certain pests, and why different vegetables required different types of soil.

"In forming health habits, the parents again assisted. One of the outstanding aids in maintaining good health was the hot lunch program. The parents donated lumber and labor and screened off a kitchen in the corner of the room. Each child brought a can of fruit or vegetables to supplement the food purchased for lunches. A well-balanced diet with the necessary vitamins was prepared each day.

"Our community is a large one, and many pupils came walking for two miles, over hills, thru narrow paths, and across creeks, which at times were swollen. To lesson the fear of the parents for the little ones, we had guardians for each group of children. Here again the teacher knew her children. She knew from which direction they came and other factors before she selected guardians for protection to and from school. Pupils enjoyed responsibility and here again the parents cooperated by having little Susie and Billy ready the following morning. These guardians were commended for their services and were changed often to give others a chance to serve the school and community.



"Our collection of books and magazines were made available to the entire community. What we had was for the child in the home as well as in the school.

"Our children were grouped not in grades but according to their abilities. We found out where each child was, put him in the group in which he belonged, and carried him as far as we could during the term, changing him from group to group as he progressed. In spelling, language, and writing we tried to teach the pupils correct expression of oral language and to spell and write correctly all words which they were apt to meet now or later. We dwelt on correct forms of different kinds of letters, simple paragraphs, and the sequence of stories. In reading, we tried to teach the child how to read, lead him to like to read, and to broaden his reading interests.

"Happy is the teacher who has this kind of working relationship with home and community in the exciting business of child development."<sup>15</sup>

### *It Happens in Many Spots*

Miss Watts' School may be isolated in space but it is not isolated in program. The work of her school is part of the larger program of the county and state. Mrs. Naomi C. Wilhoit, of the Kentucky State Department of Education, tells how the teachers of Breathitt County brought to their pre-school planning conference all the county agencies to give the teachers reports on the health, agriculture, forestry of the county. The teachers used this information as the basis of plans to make their communities more conscious of their needs. They also planned how to use experiences in the school curriculum which would direct the students toward wise use of resources. This was approached in part thru efforts to improve health. Children's diets were especially poor, and the children with the teachers planned lunch programs to supplement the meager home supplies. They planted gardens to learn how to raise needed foods. They planted trees to save

<sup>15</sup> Bertha Watts. "Happy Is the Teacher." *Virginia Journal of Education*. February 1947. The article was distributed by the Rural Editorial Service, Chicago, Illinois, and appeared in a number of state education journals.



gullies from further washing. Students and their parents learned how to preserve food. Older children and parents worked on sewing and clothes design. School and community joined to plan and develop recreation programs. In one year's time, the personal appearance and personalities of people in the communities were changing. The shy, undernourished, poorly groomed mountain people were enjoying better living because of the school's program in that county. Miss Watts' School was one result.<sup>16</sup> Thru many efforts such as these, schools of America are reshaping its culture into more effective means of satisfying human needs.

### Man—the Key to Action

Study of natural resources by themselves, without study of how society has organized itself to obtain use of the resources, cannot be wholly fruitful. As Zimmerman pointed out, the presence of man is what makes a resource a resource. Knowledge of resources is vital because that knowledge is a prerequisite to better use of resources for wider benefit for longer periods of time.

But the word "better" immediately brings the student face to face with the understanding that facts alone are not sufficient. As a member of a community and nation, he must make judgments of how resources are used and who is to benefit in what way from their use. Governors of the states in the White House Conference of Theodore Roosevelt ended their resolutions with the statement that "monopoly [of resources] should not be tolerated." They recognized that the benefits of using resources were guided by the social values which govern use. To them, monopoly meant that resources would be used to enrich the few at the expense of the many, and they registered their opposition to that kind of social value. A study of resources cannot be complete until

<sup>16</sup> From report by Mrs. Naomi C. Wilhoit, Kentucky State Department of Education.

it includes a study of the ways in which the resources are used and how that use is controlled.

Some of the illustrations already given have pointed in that direction. The Ohio State Demonstration School study of "Mines, Minerals, and Mining," reached into the problems of working conditions and compensation for the miners of the coal. It did not, apparently, consider the social organization which permitted working conditions so disagreeable and dangerous that we are still paying penalties in labor unrest and management disorganization. Few, if any, of the other illustrations would support a belief that schools recognize that many of the resource problems with which they are now attempting to deal result from unchecked and uninhibited use of the resources of America for wholly private ends. To do so would require that use of resources be adopted as one major theme in organization of the curriculum. Ohio State Demonstration School found that its study, limited as it had to be, covered a year's time.

Perhaps, then, no satisfactory accounts can be given of a school program which considers carefully all the resources of the nation and region, and then follows their production and use thru the maze of interrelationships of the natural environment on thru the more complicated and delicately balanced interdependence of modern society, finally emerging with a critical evaluation of society's organization and its effectiveness in supplying the wants and needs of present and future generations on the widest possible basis. There are many balances and much lack of balance that such an educational program would have to explore—within the natural environment itself; between individual freedom and community benefit; between personal initiative and social control; between present needs and future needs; between regions and nation; between nation and world; between planning and *laissez faire*. For the search is for a balance that will permit

us to have both parts of sets of values which at times must appear antithetical.

Luckily, we are finding technics by which the choice can be avoided and the conflict minimized. We can use land and have it, if we follow known principles of land-use, and if the social organization under which we operate makes possible the kind of agriculture which establishes a new balance to replace the natural balance. We can have planning, so that the best use of our resources for society's benefit can be obtained, and we can have freedom also, if the planning is democratic, reaching its conclusions on the weight of objective evidence and wide consensus. A satisfactory statement of education's responsibility in creating general understanding of resources is in Mr. Olsen's article, noted earlier.<sup>17</sup> His conclusion is:

*"School study of America's resources in their functional flow makes imperative an integrated science-social studies curriculum sequence. Science deals largely with material things; social studies with people, institutions, and ideas. When the study of resources is approached thru science courses, therefore, primary concern is given to earth resources and perhaps to technology. And when resources are analyzed in social studies courses, most emphasis naturally falls upon institutions, aspirations, and people. Yet, as we have just seen, the whole meaning of the American problem will be missed unless all resources are studied, and then not only as separate areas but also in their functional interflow. That is why the integrated approaches of both science and social studies are essential to the development of social perspective in children and adults alike."*

Zimmerman had earlier stated the desired result when he said:

*"In my opinion, the greatest need today is for leaders endowed with a highly developed social consciousness and a broad outlook,*

<sup>17</sup> Edward G. Olsen. "Educating for Social Perspective." *NEA Journal* Vol. 31, No. 9, December 1942. p. 278-79.

insure continuing improvement in living for all the people, and (b) that the school as a specialized educational institution is a functioning, integrated part of a dynamic community life.

The school is one agency which helps to provide better living for all and which has especial responsibility for the education of people. Hence, the purposes of a community school are (a) to enrich and make realistic the education of children, youth, and adults, and (b) to improve community living.

The program and services of a community school reflect and deal with the problems and resources of its community, and with the intelligent uses of all resources. The method of the community school is based upon cooperation. The school, therefore, (a) secures the services of other agencies, (b) makes full use of community resources, (c) assists other agencies with their programs for community betterment, and (d) promotes the development of community leadership.

### *Types of Resources*

Resources are found and developed in (a) the natural environment, (b) the biological, psychological, and spiritual potentialities of human beings, and (c) the social environment. These are three arbitrary divisions of the unified environment of which man is a part. The divisions are made for practical purposes. They are:

1. *The natural environment.* The inorganic and the organic substances and forces (besides man) of the environment, in all their interrelationships and patterns of existence. These are the natural resources upon which man depends for sustenance. They include: air, water, sunshine, soil, minerals, plant life, and animal life.
2. *The biological, psychological, and spiritual potentialities of human beings.* These potentialities are: man's biological energy, his capacity to do work and effect changes in his environment, as reflected in his state of health and physical activity; man's psychologi-



cal energy, his capacity to solve problems intelligently, as reflected in stability and integration of personality and in creative living; man's spiritual energy, his capacity for moral and esthetic aspirations and achievements, as reflected in the continuing struggle for better living for all men.

3. *The social environment.* The processes and structures of group relationships for satisfying human wants, as reflected in social and economic institutions, organizations, social classes, language, customs, and technology.

### *Use of Resources*

The intelligent use of resources in any situation may involve:

1. Utilizing fully and appropriately resources which are available
2. Making new resources available thru development and conservation
3. Adjusting utilization of available resources to their capacity to sustain continuing use.

### *Areas Considered*

To reduce the project to manageable proportions the area of resource-use under consideration must be limited. Three areas have been defined, with this need for limitation in mind. They are educational concepts, programs, and methods which are directed toward:

1. Raising the income base
2. Improving patterns of using food, clothing, and shelter
3. Improving community life by raising the level of individual and group participation in community activities.

Each of these three is considered an area of adjustment—the mutual adjustment of individual and group wants and the natural, human, and social potentialities of the environment. The quality of education in each of these areas is to be judged by its success in providing the information, understanding, skills, and attitudes necessary to satisfactory adjustments in the community, state, region, nation, and world.

### *Subdivisions of Areas*

To indicate more clearly the concern of the project, the three areas are subdivided as follows:

1. *Raising the income base*
  - a. Improving the productivity of industry
  - b. Increasing the markets of industrial products
  - c. Adjusting the pattern of industry to the availability and status of resources
  - d. Developing new industries to utilize resources
  - e. Improving the productivity of agriculture
  - f. Increasing the variety of agricultural products
  - g. Increasing the markets for agricultural products
  - h. Adjusting the pattern of agriculture to the availability and status of facilities
  - i. Developing new patterns of agriculture to utilize resources
  - j. Increasing the availability of transportation, communication, and service facilities
  - k. Improving transportation, communication, and service facilities
  - l. Relating the pattern of transportation, communication, and service facilities to the occurrence and use of resources
  - m. Increasing individual skills and abilities for increased productivity and efficiency in agriculture, industry, transportation, communication, and services
  - n. Increasing wage and salary levels
  - o. Increasing security against sickness, disability, and old age
  - p. Increasing the purchasing power of wages and salaries.
2. *Improving patterns of using food, clothing, and shelter*
  - a. Improving diet habits on the basis of scientific nutritional standards
  - b. Increasing the variety of foods available for a proper diet especially, at lower price levels
  - c. Increasing the nutritional quality of foods available, especially at lower price levels
  - d. Improving patterns of land, water, and forest management to raise the nutritional quality of foods
  - e. Increasing skills and improving habits in home preservation of foods, from the standpoints of variety and of nutritional qualities

- f. Increasing and improving community facilities for scientific food preservation
  - g. Improving clothing habits on the basis of accepted standards of protection, comfort, and style
  - h. Increasing the variety of clothing available, especially at lower price levels
  - i. Improving the quality of clothing available, especially at lower price levels
  - j. Improving the utilization of resources to provide raw materials for clothing
  - k. Improving skills and habits in making and adapting clothing
  - l. Improving the quality and efficiency of manufacture processing of raw materials into clothing
  - m. Improving housing according to accepted standards of adequacy, durability, function, and style, especially at low price levels
  - n. Increasing the availability of adequate housing, especially at low price levels
  - o. Improving processing and the utilization of raw materials for housing
  - p. Maintaining and improving the amount and quality of resources for housing
  - q. Improving skills in building, adapting, and improving housing.
3. *Improving community life by raising the level of individual and group participation in community activities*
- a. Increasing individual participation in group and community activities
  - b. Increasing group participation in programs of common interest to the whole community
  - c. Increasing harmony and cooperation among groups
  - d. Increasing citizen knowledge of and use of community agencies and institutions
  - e. Improving the use of county, state, regional, and federal agencies by the community
  - f. Developing in individuals skills in cooperative group and community activities
  - g. Developing in groups more effective methods of organization and action
  - h. Developing more effective coordination and planning for the total community

- i. Increasing the individual's sense of belonging, participation, and pride in his community.

### *Suggested Outcomes for School Programs*

The school program designed to improve living for pupils and community develops philosophy, methods, and materials to achieve understanding and competence in the fields above. This effort is not at the expense of other major educational objectives—such as the development of basic skills, expression thru the creative arts, and others—but is integrated with them in a unified school program. It is the task of the cooperative program to define the specific outcomes desired of the school program in the three areas delimited. Some of the results of this effort may look like the following.

#### *1. Basic information*

- a. The major industrial and agricultural resources of the community and their pattern of occurrence
- b. The major patterns of industry and agriculture—kinds, location, materials used, major processes
- c. The extent to which resources are being used by agriculture and industry
- d. The extent to which resources are not being used or are being wasted by industry and agriculture
- e. The major markets for industrial and agricultural products
- f. The major problems in industrial and agricultural production
- g. The major resources for food production, housing, and clothing—their pattern of occurrence and their status
- h. The major patterns of processing food, clothing, and housing
- i. The major habits of diet, housing, and clothing
- j. The major occupations and their distribution
- k. Salary and wage levels and their distribution
- l. The current purchasing power of salaries and wages
- m. The social organizations and institutions working in the community and their purposes and methods of working.

#### *2. Basic understandings*

- a. That income levels depend upon the number and kind of jobs available



- b. That the number and kind of jobs available depend upon the way and extent to which industrial and agricultural resources are being used, the markets available and how they are being used, and the way income is being distributed
  - c. That occupational skills and individual efficiency condition both the income of the individual and the possibilities of using industrial and agricultural resources fully
  - d. That food, clothing, and shelter affect the health and efficiency of individuals and of agriculture and industry
  - e. That the kinds of resources available and the way they are being used affect food, clothing, and shelter
  - f. That good health depends on good diet which depends on good soils
  - g. That careful planning and use of available resources can improve food, clothing, and shelter
  - h. That diet can be much improved by home growing and preservation of foods
  - i. That the improvement of incomes, food, clothing, and shelter is partly a problem of national and world policies, but that the people of the community can do much to make their own lives better
  - j. That improving incomes, food, clothing, and shelter in the community requires individual and group participation in community activities, and cooperation among groups
  - k. That the community is a better place to live if people participate fully in its activities
3. *Basic skills*
- a. Ability to find and interpret data about industry, agriculture, natural resources, wages, occupations, food consumption, housing and clothing conditions, community organizations, and participation in community life
  - b. Ability to present such information in written, graphic, and oral form
  - c. Ability to recognize and interpret signs of deterioration and maladjustment in income, food, clothing, shelter, and community life—unemployment, malnutrition, and intergroup conflict
  - d. Ability to apply scientific generalizations to new facts and situations about income, food, clothing, shelter, and community life

- e. Ability to perform some simple technics, such as gardening, cooking, preserving foods, repairing furniture or clothing
  - f. Ability to recognize the implications of public policy for income, food, clothing, shelter, and community life
  - g. Ability to participate effectively in cooperative group activities
  - h. Ability to use the common machinery of democratic decision-making and government.
4. *Basic attitudes*
- a. The natural resources of the community are the foundation of income, food, clothing, and shelter both for present and future generations; they should be used wisely.
  - b. These resources are a heritage of all the people, not of a few. They should not be used to enrich a few people at the expense of others or to the detriment of the resources themselves.
  - c. Those who control the exploitation of these resources should regard them as a public trust.
  - d. The health and happiness of the people of the community depend partly on their level of income; their use of food, clothing, and shelter; and their participation in community life.
  - e. The people must have health, energy, and skills to be able to improve their lives.
  - f. Scientific principles and methods should be followed in improving income, food, clothing, shelter, and community life.
  - g. Social organizations and institutions, including government, are tools for the community to use in making these improvements.
  - h. The people of the community have freedom to make choices about income, food, clothing, shelter, and community life. In return for freedom to choose, they have the responsibility of choosing wisely.
  - i. Each individual has responsibility for using resources wisely and for participating in the life of the community. He should do his part to improve income, food, clothing, shelter, and community life.

### *Characteristics of Suggested School Program*

If these are some of the outcomes desired from a school program, we can suggest some of the practices or character-

istics of a program seeking to achieve them. The school:

1. Provides experiences which enable pupils to learn the information, understanding, skills, and attitudes necessary to wise resource-use
2. Provides experiences which enable pupils to develop skills, understandings, and attitudes necessary for constructive participation in cooperation, group and community activities, and democratic government
3. Provides experiences which enable the student to master the fundamentals of a scientific approach to the solution of personal and community problems
4. Thinks thru its philosophy of education and the outcomes it desires to achieve, and bases its practices and activities thereon
5. Utilizes whatever available methods and materials that prove best for the purposes desired
6. Guides the growth of activities out of the interests of pupils rather than superimposing them on pupils
7. Maintains a spirit and practice of continuous self-evaluation and improvement
8. Uses democratic planning in evolving the program of the school including participation of administrators, teachers, pupils, parents, and the community
9. Participates actively in the life of the community, providing (a) educative experiences for the young people, and (b) leadership in the community
10. Utilizes other community agencies, leaders, and resources to improve instruction
11. Enables and encourages teachers to be part of the economic, social, and cultural life of the community
12. Makes the school grounds a demonstration of wise resource-use
13. Provides a clean, healthy, wholesome environment for child and adult activities
14. Makes the school plant available for adult education, recreation, cultural life, and other community activities
15. Makes its equipment and teaching skills available to provide training and educative experiences for adults
16. Furnishes personal guidance to young people to help them make personal, vocational, and social adjustment—both while they

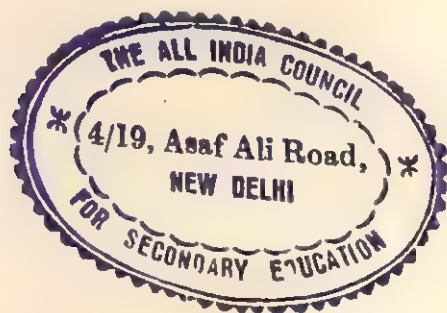
are students and between the time they leave school and the time they achieve adjustment into adult life

17. Seeks opportunities for and guides educative-work experience for young people

18. Keeps informed of community needs, problems, and opportunities

19. Provides opportunities for inservice training and professional growth for teachers, and encourages and enables them to take advantage of other opportunities of this kind.

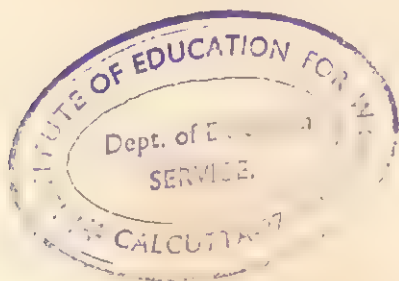
This project is illustrative only. The significance of the framework under which it is to be conducted is great, however, since it suggests the wide scope that school programs concerned with comprehensive study of resources must adopt. If we study what we have, what we know, and what we want, we study the total relationship between man and his resources. We can then reach a school program which points toward better life for all.





It is time that we face about and reorient education toward the process of engineering a permanent and enduring society. Foremost among the problems requiring immediate attention and frontal attack is the waste of our natural resources—our physical and biotic wealth.

—GEORGE T. RENNER





## How May We Move Ahead?

EDUCATION on resources is neither fad nor frill. It is rather a prime social imperative becoming more obvious with every passing year. If we Americans continue to squander natural resources at present rates, our economic and ultimate social decline as a nation appears certain. Our common human welfare now demands immediate, practical, and sustained school instruction in this social problem area.

Yet it is also clear that:

"Conservation must exist in the mind before it exists on the land. The number one problem in the establishment of conservation lies before the educators of the nation. The causes of destruction and depletion are deeply fixed in the American way of life, in the habits, attitudes, and institutions which comprise our culture. The problem cannot be legislated out of existence unless and until conservation is supported by popular ideas, attitudes, and beliefs. Thus the superintendent of schools is the key leader in educating the apathetic citizen. Our schools should make the citizen aware of the resources upon which he depends for survival, the role they play in the rise and decline of civilizations, and how they are to be regarded as to their abundance and exhaustibility. Translating conservation into school terms, the ultimate issue is hunger, squalor, poverty, ignorance, destruction of physical and social vitality, depopulation, and finally disappearance of the civilization. Every teacher, in every grade, in every subject, must share this responsibility of teaching conservation, the primary duty of our schools. Conservation being a matter for education, the schools must accept the major responsibility of relating it to ordinary life."<sup>1</sup>

<sup>1</sup> Ollie E. Fink. *The Gateway to Conservation*. Friends of the Land, 1638 North High Street, Columbus, Ohio. p. 9-10. (Mimeo.)

This statement well expresses the sound and historic conviction that the educational process, and more particularly the school, does provide an essential method of arriving at better practices in using our environment. Theodore Roosevelt, it will be remembered, called in educators along with scientists and political figures when he held his White House Conference on Conservation in 1908. Van Hise followed that conference with a college text on conservation. Perhaps more significantly, a number of states in the years that followed adopted legislation requiring instruction in the conservation of natural resources in the public schools. However much we may deplore this compulsive method of curriculum construction, it does illustrate the growing public concern that the schools carry out their implied obligation to aid wise use of resources.

### Curriculum by Law

Since 1929, at least eight states—Arkansas, Florida, Georgia, Kentucky, Maryland, North Dakota, Oklahoma, and Wisconsin—have added legislation requiring school instruction in natural resources. Conservation has thus moved from a concern of colleges and universities alone to that of the entire public-school system. The Kentucky law of 1944 is a good example of this kind of legislative requirement. It is entitled “An Act Relating to the Teaching of the Conservation and Preservation of Natural Resources in the Public Schools of Kentucky,” and reads in part:

*“Whereas, the natural resources of this state—forests, soil, water, minerals, and wildlife—have been exploited and destroyed so that coming generations will be deprived of their privilege of economic welfare, therefore,*

*“Be it enacted by the General Assembly of the Commonwealth of Kentucky:*

*“Instruction in all phases of conservation and preservation shall*



be included in the curriculum of the public schools of Kentucky, and textbooks regarding the proper use and production of forests, soil, water, minerals, and wildlife shall be prepared or selected by the State Textbook Commission for this purpose."<sup>2</sup>

This Act, like similar ones in other states, places direct responsibility on the schools to modify harmful practices in use of resources. It also directs the state school officials to make sure that adequate instructional materials are provided for this purpose, even to the extent of preparing them as needed.

### Leadership at a National Level

The Franklin Roosevelt program of resource development, as well as the dramatic warnings of dust storms and floods during the 1930's, hastened efforts of schools to undertake instruction in wise use of resources. In 1937 the U. S. Office of Education called the first national conference on conservation education. This was attended by representatives of federal agencies in Washington, state education executives, specialists in education and conservation from universities and colleges, and officers of lay organizations working in the interests of conservation. These experts recommended that the Office of Education enlarge its program at the earliest possible moment "to serve the growing needs of schools in the United States in the field of conservation education."<sup>3</sup>

The Office of Education followed that conference with the issuance of an excellent bulletin, *Conservation in the Education Program*. This publication outlined a framework for teaching resource-use, identified school programs of merit in several states, and provided a helpful bibliography for teacher use. It concluded that "the importance of conservation education to our social, economic, and political life is such that it should be made an integral part of the program of instruc-

<sup>2</sup> Kentucky Acts of 1944. House Bill 313.

<sup>3</sup> Reported in, *School and Society* Vol. 46, No. 1180, August 7, 1937, p. 172-73.

tion."<sup>4</sup> It suggested also that seven guiding principles be followed when introducing the study of resources and their use into the school program. These principles were:

1. Conservation cannot be adequately taught thru a single unit or a series of single units in this field. While for purposes of emphasis it may be desirable to develop such units, it is only as the concepts of conservation are made a fundamental part of curriculum planning that the subject can be adequately treated.

2. The materials of conservation education lend themselves effectively to curriculum planning. Conservation forms one of the major themes which may appropriately be considered in curriculum construction.

3. The materials available in the field of conservation from both private and governmental sources provide basic material to be developed and organized for instructional purposes.

4. In developing a program of conservation education it is important to consider the various aspects of conservation, but such consideration should by no means narrow the view of this subject for the pupils. It is important that the whole problem be approached in the large.

5. Conservation education cannot appropriately be confined to any one subject or field. Its understanding and appreciation come best thru a knowledge of materials in several fields including economics, science, civics, agriculture, home economics, and geography.

6. The primary concepts of conservation can be understood and appreciated in their elementary form by very young children.

7. In developing a curriculum in conservation education its larger concepts should be dominant and such aspects as the study of wild flowers, the protection of game, the proper utilization of mineral resources should be presented as elements in the developments of a complete program.<sup>5</sup>

A number of representative practices are recounted in such states as Virginia, New Jersey, Pennsylvania, South Dakota, Michigan, Wisconsin, and California, and efforts to relate teacher-education to conservation are briefly described. In

<sup>4</sup> W. H. Bristow and Katherine M. Cook, *Conservation in the Education Program*, Bulletin No. 4, Department of Interior, U. S. Office of Education, Federal Security Agency, 1937, p. 8.

<sup>5</sup> *Ibid.*, p. 9.



*Soil Conservation Service, U. S. Department of Agriculture*

**Clay County, Alabama Teachers Study Timber Stand Improvement**

another bulletin the following year, the Office of Education supplied useful suggestions for organizing conservation instruction in the elementary school, and suggested a unit on soil conservation with activities suitable for primary, intermediate, and advanced pupils. An excellent bibliography of materials is present.<sup>6</sup> A special bulletin on conservation excursions, published in 1939, gives detailed information on planning, conducting, and evaluating field trips as part of instruction in the use of resources. Activities are suggested for excursions to study soil, water, flowers, trees and forests, birds, fish, minerals, history, and culture.<sup>7</sup>

### **Regional Activities Have a Place**

These national efforts served to stimulate and guide significant regional interest in the increase of instruction on re-

<sup>6</sup> Effie G. Bathurst. *Teaching Conservation in Elementary Schools*. U. S. Office of Education, Federal Security Agency, Bulletin No. 14, 1938.  
<sup>7</sup> Effie G. Bathurst. *Conservation Excursions*. U. S. Office of Education, Federal Security Agency, Bulletin No. 13, 1939.

source-use. In 1939, a joint project of the Progressive Education Association and the National Education Association produced a major listing of source materials available to secondary schools and colleges on the use of regional resources, and sponsored the organization of several projects thru which research information on such subjects as nutrition was translated into instructional form.<sup>8</sup>

Furthermore, groups of states began working together to develop activities which would deal effectively with the resources of a region. Spurred by the hydroelectric expansion of the Northwest, a number of agencies formed a Pacific Northwest Regional Council in 1939, with the purpose of providing research results to educators so that the progress of the region could be hastened as information on its problems and opportunities became widely disseminated. The Council prepared a comprehensive bibliography of research materials that dealt with the resources of the region, and published certain units on resources of the Northwest for use in schools.<sup>9</sup>

In 1939, also, several representatives of universities in the South joined with TVA in establishing an Advisory Panel on Regional Materials of Instruction, which set its purpose to encourage and assist in translating the results and benefits of research into educational programs that contribute to the solution of regional and national problems. It guided preparation of materials on malaria control, community planning, and the general principles of resource development. Its actual accomplishments in the preparation of materials were overshadowed, perhaps, by a wider success in stimulating interest of schools and colleges in more effective dealing with problems of resource-use.

<sup>8</sup> Paul R. Hanna, Harold C. Hand, and others, *Role of Education in Utilizing Regional Resources*. New York: Progressive Education Association, 1939. (Mimeo.—out of print.)

<sup>9</sup> See, *Men and Resources: A Study of Economic Opportunity in the Pacific Northwest*, 1941; *Pacific Northwest Resources in Outline*, 1940; *Forest Depletion in Outline*, 1940; *Soil Conservation in Outline*, 1940. Portland, Oregon, The Pacific Northwest Regional Council.



To some extent, its efforts led to the formation of the Committee on Southern Regional Studies and Education in 1943. That committee, established by the American Council of Education and supported in part by grants from the General Education Board, has been remarkably effective in leading and merging the various interests of the South in better use of its resources. It has sought to strengthen the services of existing state and regional organizations in research, education, and planning, and has worked with thirty-eight regional organizations and more than six hundred fifty state institutions and organizations. It has prepared regional materials needed for more effective instruction on resources, has aided states in the establishment of administrative organizations which will devote their attention to state problems in education on resources, and has become the clearinghouse for information on developments thruout the South.<sup>10</sup>

At present writing, the committee is guiding the preparation of a source book on resources of the South. This volume, written by the staff of the University of North Carolina, will doubtless provoke general interest while having greatest usefulness within the region where the problems it recounts are immediately vital to the people.

### States Tackle the Problem

Individual states also have been active in increasing their emphasis on education and resources. Many state departments of education have issued bulletins providing suggestions on the subject, among them being Wisconsin, Michigan, Tennessee, Virginia, Illinois, New York, and California. The Virginia State Board of Education has included a supervisor of conservation studies, who works directly with the schools and

<sup>10</sup> For further information on the work of this significant committee see, John E. Ivey, Jr. *Channeling Research into Education*. Washington, D. C.: American Council on Education Studies, 1944; *Education for Use of Regional Resources*. Washington, D. C.: American Council on Education, 1945; and *High School Journal*, May 1946. The Committee also publishes a periodic newsletter, with brief accounts of educational activity in the South.

teachers of the state in preparing materials on resources and in aiding teachers to develop more effective instruction in the field. Alabama and Texas have supervisors of resource education whose duties are similar. Michigan has a comparable position in its state department of education. North Carolina has established a Commission on Resource-Use Education, composed of representatives of forty-five agencies operating in the state, with an executive secretary who will bring the various agencies into focus on the resources of North Carolina and the contribution which the schools can make to their better use. Florida has established a similar commission, and the four states of Arkansas, Louisiana, Oklahoma, and Texas, have set up an interstate resource-use education committee, which ties together efforts in those states.

Special materials by states are also in preparation. In Louisiana, for example, a materials bureau has been established in Louisiana State University that responds to needs identified by the Louisiana schools for materials dealing with state and local situations. The authors of the books are specialists on the university faculty; the state department of education approves the material for use in the schools. It is then edited by the Educational Materials Bureau so that the language is suitable to the grade level for which it is intended. After the book is tried out in a few schools and revised in line with criticisms by the teachers and their pupils, it is passed upon by the state board, published, and distributed over the state. By this effective route, Louisiana has been supplied with such supplementary materials as *Louisiana's Natural Resources, Their Use and Conservation* by John B. Robson; *The Mississippi River* by Richard Joel Russell; *The Indians of Louisiana* by Fred B. Kniffen; *Trees and Forests of Louisiana* by Alden L. Powell. Other volumes are planned on geology, salt and sulfur, petroleum and natural gas, and old Louisiana trails.<sup>11</sup>

<sup>11</sup> See, *Education in Louisiana* Vol. 5, No. 5, November, 1946, p. 6.

## Bases for Advance

### *Encouraging Interaction*

These various regional and state activities have been directed toward three general ends. *They have been concerned with developing more direct and immediate contacts and relationships among the educational groups and the research and action groups.* There has been definite need, for example, to bring educational leadership into direct contact with what other public agencies are doing so that the educational program can benefit immediately from the results of research, thus minimizing the lag that lies between proved research and educational programs. By so doing, educational agencies can effectively support the efforts being conducted by other public agencies. If the state health department is concerned with improving the health of the people of the state thru control of various health hazards, the school has a responsibility to become a part of that effort. It cannot remain either unaffected or unconcerned if it is to execute a significant function in community life. Its chance of doing so, however, will depend upon the closeness of its relationship to public and research agencies other than itself.

### *Preparing Materials for Local Needs*

*The regions and the states have been actively interested in preparation of materials which will reflect the most recent research and will be pointed directly toward the problems of the areas themselves.* These specialized materials supplement the more usual textual material available on a nationwide scale, which, of necessity, cannot deal specifically with the problems and opportunities of each region. It is necessary, therefore, to supplement the nationally produced materials with those of more immediate application. The problems of irrigation are of little concern to states of heavy rainfall, but they

are of controlling concern to the Rio Grande Valley. Regionally and locally produced materials can bring background information out of a broad view into a more specific and therefore more urgent focus.

### *Providing Learning Experience for Teachers*

*The states and regions have given attention to the education of teachers who will be able to function effectively in this field. Thru a great variety of methods, both preservice and inservice education of teachers are being modified to assure more effective instruction about resources. Naturally the greater amount of this has been in the inservice field, where special summer activities can be undertaken without major reorganization of a college curriculum. In the South, for example, during the three summers 1944-1946, over two hundred separate workshops and study groups have been held to study resources and to identify ways in which the schools can more effectively modify the culture to provide for their better use. Most of these workshops have been held on college campuses, but many have been organized within the communities themselves, sometimes drawing together the major portion of teachers in the county. Typically, the teachers have analyzed the resource bases of the county, studied the principles of the resources they find with the aid of specialists from the various fields of knowledge, and have then prepared plans for use in their schools during the following year. Kentucky has established a program which continues thruout the year; this identifies each teacher-education institution within the state with a neighboring county school system. The institution and the school system work together to find more effective ways of relating the school program to the community life, and in so doing identify the ways in which the resources of the community can be brought to bear more satisfactorily on the level of living in*



the community. Thru such joint planning and evaluation, the county and the college both benefit.

The Ohio Program for Improving Conservation Teaching thru Inservice Education illustrates effective cooperative effort. This program, sponsored jointly by the Ohio State Department of Education and the Division of Conservation and Natural Resources, in 1946, enrolled most of the key school administrators in eight selected counties. Four main sessions at two-week intervals were conducted for each county during the fall of the year, with follow-up or continuation sessions later. The administrators studied the physical basis of resources, soil conservation, improvement of land-use practices, forestry and woodlot management, wildlife management problems, school implementation, and the like.

Ohio School Administrators Study Rock Formations Underlying Their County

Ohio Division of Forestry—Bob Wheaton



A total of 389 persons representing conservation-concerned agencies attended these sessions, and over one hundred and fifty people were regular participants. Considering the realities of educational leadership, it is significant that 91 percent of the county school leaders attended sessions, three-fourths of them regularly. A full-time qualified program coordinator planned the courses, conducted the sessions, and evaluated results, among which are projects and plans for countywide teachers meetings, inservice training programs for all teachers, and a general renewal of conservation interest in many individual schools.<sup>12</sup>

During the summer of 1947, the Eastern Washington College of Education at Cheney took still another approach to the study of resources. It offered an integrated Columbia Basin Workshop devoted to systematic study of the total Columbia Basin Project including Grand Coulee Dam as an example of successful government planning. According to their special interests, students studied the project in relation to its historical, geographic, geologic, economic, biologic, sociological, and educational aspects. Consultants included a nationally known geographer and geologist, expert economists and sociologists, construction engineers, hydroelectric engineers, farm planners, land settlement experts, and soil scientists. Field trips, discussions, audio-visual aids, individual experiments and group research projects, and committee reports were among the learning approaches used. Participants developed appropriate learning units for both elementary and junior high-school levels. Academic credits were earned partly in education and partly in history, geography, biology, and other fields as desired by each individual student.

These are but three illustrations of what is being done primarily on the inservice level to help qualify teachers for

<sup>12</sup> See, Carl S. Johnson. "School Men Tackle Conservation." *Ohio Conservation Bulletin* Vol. 2, No. 2. February 1947. p. 14-15, 28.

effective work in instruction on resources. For obvious yet often illegitimate reasons, preservice education has thus far been less affected directly. In at least one state, however, a four-year organized curriculum in conservation is now offered. The Central State Teachers College at Stevens Point, Wisconsin, established in 1946 a conservation major which considers natural resources from various points of view including their economic importance, biological and ecological relationships, and esthetic and recreational values. Enrolled students receive carefully planned instruction in forestry, geology, wildlife management and recreation, social adjustment and planning, soil conservation, public health, economics of land-use, and the like.

Professional programs like this, if sufficiently extended and improved, should eventually produce teachers who can guide that understanding of resources which our nation needs and lacks today.<sup>13</sup>

It is evident that schools and colleges are taking up the challenge issued forty years ago in the White House Conference of 1908. They are accepting their responsibility for dealing wisely with the many knotty problems of wise resource-use and they are organizing their instruction so that they can hope for specific, concrete, and significant results. Only a beginning has been made, but that beginning seems to have vitality enough to promise a strong future. Administrative and supervisory aids are needed; materials are needed; and teacher education is needed. Work is being done on all of these problems, and many of our schools are undertaking extensive programs which will be of considerable significance.

<sup>13</sup> Teachers may be ahead of college administrators in their concern about resources. One conclusion of a survey conducted by Vernon G. Carter in Zanesville, Ohio, was: "Teachers would teach more conservation if they knew more about it. More than 40 percent of those returning questionnaires would take training, if it were easily available . . ." See his "Conservation Education Gains Favor" in *The Elementary School Journal* Vol. 46, No. 10, June 1946, p. 561-62.

### Teachers Can Take the Lead

In this field as in every other, however, the essential key to continued advance is the teacher himself. Such teacher-education programs as described, whether preservice or in-service, are unfortunately few and scattered. What, then, might be done by the individual teacher who feels concerned about wise resource-use, desires to develop an emphasis on resources in his own instruction, yet must direct his own study? What helps can he find? Where can he secure guides to individual study and action? How might he proceed "on his own" to develop increased competence in education on resources?

There is no easy or single answer to these questions but two suggestions may be offered: (a) use a variety of learning experiences in self-education as in classroom teaching, and (b) seek significant instructional materials and experiences from varied sources. Let us briefly consider each of these.

#### *Use a Variety of Learning Experiences*

A number of different ways can be used to learn about resources. Direct, firsthand experience in seeing and solving problems of resource-use is perhaps the most vivid. But that direct experience must be supplemented by other types of experience—documentary materials, audio-visual aids, constructing activities, and community experiences—if learning is to be fully effective.<sup>14</sup> These four types of learning experience include both vicarious and direct approaches. Within each of them several more specific kinds or types of learning experiences are possible: (a) books, magazines, bulletins, pamphlets, newspapers, lectures, discussions, essays, debates, reports; (b) maps, charts, graphs, objects, specimens, models, pictures, slides, filmstrips, motion pictures, recordings, radio

<sup>14</sup> For fuller explanation of these four approaches see, Edward G. Olsen, "Getting the Community into the Curriculum," *Educational Leadership* 4:328-33; February 1947.



programs; (c) drawing, painting, modeling, mural-making, dramatizing, constructing, displaying; (d) resource visitors, interviews, field trips, surveys, service projects, and work experiences.

No single learning project or unit of work is likely to use all of these experiences. But every good program should include one or more experiences of *each major type*; for example, one should read and talk about the physical, economic, and social aspects of resources and their wise use; should study pictures and charts, see slides, filmstrips, and motion pictures; might draw, paint, or model relevant data; and should surely hear conservation speakers, take field trips to see conservation needs and procedures, and survey local problems and resources. An excellent procedure is to study a particular section of land, mapping its devastated areas, analyzing its reclamation possibilities and appropriate technics, planning ultimate and needed next steps, recommending accordingly, and then actually engaging in conservation efforts as a part of community service.

All four types of experience should be used in balance if effective learning is desired. This is as true for the adult as for the child.

### *Discover Many Sources*

Teachers interested in gaining background information on resources or in developing school units of work can secure a wealth of documentary materials, audio-visual aids, and field experiences in the community. Such educational sources are far more numerous and readily available than many teachers realize. Excellent bibliographies, teaching handbooks, bulletins and guides, pamphlets, sample units of work, books, charts, graphs, flat pictures, colored slides, filmstrips, motion pictures, transcriptions, resource speakers, field trip opportunities and survey, service project and work experience possibilities may be secured from or suggested by the local school

or public library. Many of the following agencies also welcome inquiries and loan materials as well as provide speakers and other specialized leaders:

#### NATIONAL GOVERNMENT AGENCIES

The federal government thru several of its departments and agencies has issued a number of excellent publications, chiefly inexpensive bulletins. These may be purchased at nominal cost from the Superintendent of Documents, Washington, D. C. That office periodically issues bibliographies of government publications which can be received upon request.

*Bureau of Biological Survey*, Department of Agriculture, Washington, D. C.

Conserves wildlife; acquires and maintains bird refuges and game preserves; administers wildlife conservation laws; cooperates in development of improved methods of propagation of fur and other animals.

*Bureau of Fisheries*, Department of Commerce, Washington, D. C.

Develops methods of regulating the fish industry and supply in the interest of conservation; administers Alaska fisheries and fur-seal industries, and care of the Pribilof Island natives; administers laws for the protection of Florida coast sponges; and enforces the law regulating the interstate shipment of large and small-mouth black bass.

*Bureau of Mines*, Department of Interior, Washington, D. C.

Charged with the investigation of methods of mining; preparation and utilization of mineral substances, with special reference to the safety of mine workers and the improvement of their working conditions, and the prevention of waste thru increased efficiency. It also collects and publishes statistics covering mineral production of the United States, and makes studies of economic problems affecting the mineral industries.

*Bureau of Reclamation*, Department of Interior, Washington, D. C.

Directs investigation of irrigation projects; has supervision over construction of Boulder Dam and the development of the Colorado River Basin; also over the Grand Coulee Dam and Columbia River Basin.

*Extension Service*, Department of Agriculture, Washington, D. C.  
Sponsors 4-H Clubs whose work includes a conservation education program.

*Federal Power Commission*, Washington, D. C.

Organized to administer the Federal Water Power Act which provides for the improvement of navigation thru the development of water power on streams subject to federal jurisdiction or on public lands by private and governmental agencies acting under licenses issued by the Commission, licenses so issued to be subject to conditions prescribed to promote navigation and to conserve water-power resources for the public good. It is authorized to conduct general investigations of power resources.

*Forest Service*, Department of Agriculture, Washington, D. C.

Has general administration of national forests; conducts forest research; promotes improved forestry practices; regulates grazing in national forests; manages watersheds protected by national forests; supervises forestry emergency activities of the Civilian Conservation Corps; cooperates in development of state forests.

*Geological Survey*, Department of Interior, Washington, D. C.

Classifies public lands and examines geologic structure, mineral resources, and mineral products of the national domain; conducts investigations on quantity, distribution, mineral quality, availability, and utilization of water supplies in the United States, and studies production of hydroelectric power for public use; examines and classifies public lands as to their mineral resources and their value for power development; supervises oil, gas, and mining operations on public lands included in prospecting permits and leases under mineral leasing laws.

*National Bituminous Coal Commission*, Washington, D. C.

Its purpose, to administer the Bituminous Coal Conservation Act of 1935, in order to conserve the bituminous coal resources of the United States; to stabilize the bituminous coal-mining industry and to promote interstate commerce; to promulgate a bituminous coal code and to study and report upon the problems confronting the bituminous coal industry.

*National Forest Reservation Commission*, War Department, Washington, D. C.

Purchases such forested, cut-over, or denuded lands within the watersheds of navigable streams as in its judgment may be

necessary to the regulation of stream flow and the production of timber.

*National Park Service*, Department of Interior, Washington, D. C.  
Directs protective work toward preserving national parks for all generations and utilizing them to the best advantage for the benefit and enjoyment of the visitor; furnishes public educational service in natural sciences, history, and archaeology, in connection with areas under its care; participates in the Emergency Conservation Work program and supervises work camps engaged in recreational development on state, county, and municipal areas; cooperates with regional and state planning boards and conservation agencies.

*National Resources Board*, Washington, D. C.  
During its brief lifetime this agency issued a number of excellent reports such as *General Conditions and Tendencies Influencing the Nation's Land Requirements*; *Agricultural Land Requirements and Available Resources*; *Land Available for Agriculture thru Reclamation*; *The Problem of Soil Erosion*; *Forest Land Resources, Requirements, Problems, and Policy*; *Planning for Wildlife in the United States*; and *Recreational Use of Land in the United States*. These bulletins may still be secured from the Superintendent of Documents.

*Petroleum Conservation Division*, Department of Interior, Washington, D. C.

Assists the Secretary of the Interior to administer the Connally Law, which prohibits shipment in interstate commerce and foreign commerce of petroleum or its products produced in excess of the amount permitted by law.

*Soil Conservation Service*, Department of Agriculture, Washington, D. C.

Promotes use of soil conservation practices in agriculture; conducts research and demonstration projects in soil conservation; directs erosion-control activities of soil conservation district offices.

*Tennessee Valley Authority*, Knoxville, Tennessee  
Responsible for the maintenance and operation of government-owned properties in the vicinity of Muscle Shoals, Alabama, which involves planning for the complete Tennessee River watershed, including erosion control, forestation, the further



use of mineral resources, the promotion and coordination of industry and agriculture, surveys and plans for the proper use of land and other natural resources, and the general social and economic well-being of the valley.

#### NATIONAL PRIVATE ORGANIZATIONS

A number of private agencies and organizations are active in the conservation work. Among them are the following from whom pamphlets, bulletins, films, slides, charts, or exhibits, can be secured:

*American Forestry Association*, Washington, D. C.

Encourages conservation in the field of forestry. Magazine, *American Forestry*.

*American Nature Association*, Washington, D. C.

Issues books, a publication entitled, *Nature Magazine*, and other material to stimulate public interest in every phase of nature and the out-of-doors, and is devoted to the practical conservation of the great natural resources of America.

*American Wildlife Institute*, Washington, D. C.

An organization for the restoration of North American wildlife.

*Boy Scouts of America*, National Office, 2 Park Avenue, New York, New York.

Among the "Merit Badge Series" of publications issued by this organization for the purpose of encouraging boy scout activities in special fields are many which relate to conservation such as Agriculture, Animal Industry, Bird Study, Conservation, Forestry.

*Camp Fire Girls*, 41 Union Square, New York, New York.

Promotes conservation thru "Torch Bearer Craftsman in Conservation" program and thru Nature Lore.

*Film Libraries*

Contain motion pictures, slides, and perhaps flat picture packets which can be secured on a rental or gratis basis. Your local superintendent or principal should have such film library catalogs.

*Friends of the Land*, 1638 North High Street, Columbus, Ohio.

Conducts an active program to develop understanding of wise land-use. Organizes local chapters, and supplies certain materials.

*Garden Club of America.* Conservation and Roadside Committee.  
598 Madison Avenue, New York, New York.

Prepares information on various aspects of conservation. Cooperates with agencies and organizations developing conservation programs. Distributes material.

*General Federation of Women's Clubs.* Department of Education.  
1734 N Street, Washington, D. C.

Has active program in the field of conservation activities.

*Girl Scouts*, 570 Lexington Avenue, New York, New York.

Has a program of Outdoor Life and Conservation as a part of the girl scout work.

*Izaak Walton League of America*, Merchandise Mart, Chicago, Illinois.

Prepares and distributes material on woods, waters, and wildlife. Publishes *Outdoor America*. Encourages organization of Junior Izaak Walton Leagues to enlist the interest and support of boys and girls in the cause of conservation.

*National Education Association*, 1201 Sixteenth Street, N.W., Washington 6, D. C.

The office has published a number of teachers bulletins dealing with conservation such as, *Teaching Conservation in Elementary Schools*, and *Conservation Films*.

*National Recreation Association*, 315 Fourth Avenue, New York, New York.

Collects and disseminates information on all types of recreational activities, assists in carrying on local community recreation projects, publishes monthly magazine, *Recreation*. Includes consideration of conservation and nature projects in its recreational activities.

*Wilderness Society*, 1840 Mintwood Place, Washington, D. C.

Publishes *The Living Wilderness*. Organized to furnish leadership and encourage activities directed toward the preservation of our remaining wildernesses on state and private lands which have no governmental protection.

*Wild Flower Preservation Society*, 3740 Oliver Street, Washington, D. C.

Prepares information and materials on the preservation of wild flowers.

## STATE AGENCIES

Many individual states have issued information on resources in the form of booklets, bulletins, reports, charts, and guides. Such agencies as the following will often provide speakers as well as printed and audio-visual materials:

*State Departments of Conservation, Agriculture, and Commerce*

Many state governments include operating departments or divisions specifically organized or responsible for conservation activities of many kinds. An inquiry directed to your own secretary of state will bring full information.

*State Department of Education*

A number of state education departments have issued teaching guides, bulletins, suggested units of work, bibliographies of books, pamphlets, films, and the like. Write to your state superintendent of public instruction or commissioner of education for information, bibliographies, and loan kit publications.

*State Library*

State libraries usually house considerable printed matter dealing with conservation in all fields. Your local library can arrange an inter-library loan if desired.

## LOCAL AGENCIES

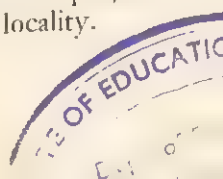
Within the local community one may secure information and other aids from such sources as these:

*Colleges and Universities*

Most institutions of higher learning include staff specialists with competence in the broad field of natural resources and their wiser use. It should prove worthwhile to make a specific request of the president's office.

*County Agricultural Office*

Most rural counties in the United States maintain county agricultural offices which stress conservation in their educational work. A letter or telephone call to your county agricultural agent at the county seat may provide printed materials, pictures, slides, films, and speakers as well as field trip, survey, service project, and work experience opportunities in your own locality.



*District Office of the United States Soil Conservation Service*

Every one of the forty-eight states has passed soil conservation legislation establishing local conservation districts. As of December 1946, 1793 such local districts have been organized. In Washington State for example, there are thirty-eight local district field offices with regional headquarters in nine communities. Each of these local offices has literature available for school use.

**More Than a Byword**

In self-education, in the schools, in the public forum, and in the whole communication process of our time it is essential that the wise use of natural resources becomes more than a catch-phrase, more than a byword, more than a "subject" of study. Wise resource-use, as this volume has tried to define and sketch it, must be widely recognized as a major educational problem of our time. It must permeate many aspects of the school curriculum; must become a significant general theme to which many school and community activities in art, biology, chemistry, English, home economics, industrial arts, science, social studies, and other areas of study are closely related.

Particularly in the now-emerging community school will a wise husbanding and appropriate use of resources be emphasized. It is thru such a school that communitywide education and intelligent public action can best be promoted as the only sure basis for enduring social advance. But regardless of school philosophy, the natural environment can no longer remain an elective subject of academic study. Conservation must now enter the required core of human experience as transmuted thru the school curriculum. The wise use of soil, mineral, water, and wildlife resources is actually prerequisite to the permanence of our urban as well as our agricultural life; to our forests, hydroelectric power, irrigation, flood control, food and clothing supplies, industrial power and products—to virtually every aspect of our common life and even to our national security itself.



Plan with vision—conserve carefully—use wisely—and we as a people can prosper in undreamed material achievement.

But continue to exploit—waste—destroy—and social decline begins.

Public ignorance and indifference are the twin threats to our common stability. Against them educators must advance in growing power the even more vital forces of popular enlightenment and democratic social action. *Ill fares our land—unless we study, plan, act.* The challenge of wise use of resources is upon this generation. In our response may lie our destiny and that of our children.

## ACKNOWLEDGMENTS

A great number of interesting examples of school practices were submitted for the Committee's use in preparing the yearbook. Those listed below were kind enough to submit examples which, for one reason or another, could not be used. The Committee wishes to express its appreciation for their aid.

AHRENS, MAURICE R., Director, Department of Instruction,  
Denver Public Schools, Denver, Colorado

BAKER, EMILY V., Department of Education, State Teachers  
College, Milwaukee, Wisconsin

BALLENTINE, MRS. R. L., Anderson Junior High School,  
Anderson, South Carolina

BANNERMAN, G. W., Superintendent of Schools, Wausau,  
Wisconsin

CRAIG, J. E., Superintendent, Belton Schools, Belton, South  
Carolina

CUNNINGHAM, EMMA B., Public Schools, Belton, South  
Carolina

CURRY, BERYL, Gladeview School, Miami, Florida

DRAG, FRANCIS L., Associate Superintendent and Director  
of Curriculum, Office of the Superintendent of Schools,  
San Diego, California

DURRANCE, CHARLES L., JR., Assistant Professor, Curriculum  
Research, University of Florida, Gainesville, Florida

FORTE, MAGGIE Y., Director, Rural Extension, School of  
Education, Tuskegee Institute, Alabama

GRIM, EDGAR L., Chief, Community School Service Pro-  
gram, Department of Public Instruction, Lansing, Michigan

HARRIS, MARGARET E., Dean, Lower School, Metairie Park  
Country Day School, New Orleans, Louisiana

HARTNETT, ELLEN, Iowa State Education Association, Des  
Moines, Iowa

HEISKELL, MRS. F. C., Virginia State College, Petersburg,  
Virginia

HOLT, CLARICE, Meadowview School, Hamilton County,  
Tennessee

JOHNSON, LESLIE W., Director of Curriculum, Superior  
Public Schools, Superior, Wisconsin (Mr. Johnson sent  
in brief accounts from twenty-six teachers.)

KITCHING, FRANCES J., Anderson Junior High School,  
Anderson, South Carolina

LASSITER, HOMER, Supervisor of Schools, Marshall County,  
Kentucky

LENNOX, RUTH, Allapattah School, Miami, Florida

MARSHALL, HILDA G., Public Schools, Martinsville, Virginia

MATTISON, C. W., Consultant, Forestry Education, U. S.  
Department of Agriculture, Forest Service, Washing-  
ton, D. C.

MCCUSKEY, DOROTHY, Curriculum Coordinator, Department  
of Public Instruction, Madison, Wisconsin

MITCHELL, MARY ALICE, Director, Elementary Education,  
Newtonville, Massachusetts

NETERER, ELIZABETH, Hawthorne School, Seattle, Wash-  
ington

O'BRIANT, MARY V., Supervisor, Northampton County  
Schools, Jackson, North Carolina

OOLEY, IDA A., Department of Public Instruction, Madison,  
Wisconsin

ORR, ETHEL M., Public Schools, Montclair, New Jersey

PARTON, DAISY, Director, Verner School, University of Ala-  
bama, University, Alabama

ROWE, CLAIRE, Gladeview Elementary School, Dade County,  
Florida

RUSSELL, MABEL, Roosevelt School, Miami, Florida

SAMS, FRANCES C., Coral Gables Elementary School, Coral  
Gables, Florida

SAYLOR, GALEN, Secondary Education, University of  
Nebraska, Lincoln, Nebraska

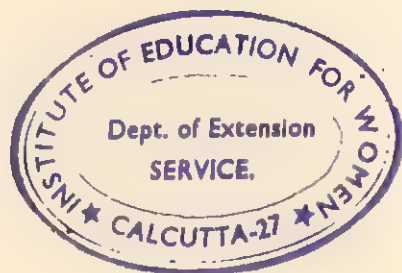
SCHMEECKLE, FRED J., Central State Teachers College,  
Stevens Point, Wisconsin  
SHAW, LUELLE, Merrick Demonstration School, Coral  
Gables, Florida  
SMITH, RUBIE, Critic Teacher, Murray State Teachers Col-  
lege, Murray, Kentucky  
STARGELL, GOLDIE B., Alberene School, Schuyler, Virginia  
SUTTON, GRACE W., Botetourt High School, Gloucester,  
Virginia  
SWEARINGEN, MILDRED E., Specialist, Elementary Education,  
Department of Education, Tallahassee, Florida  
TAYLOR, MARTHA, West Little River, Florida  
WALTERS, MAE, Orange Glade Elementary School, Miami,  
Florida  
WARE, JULIET, State Board of Education, Richmond, Vir-  
ginia  
WEIN, DOROTHEA M., President, Elementary Section, New  
Jersey Science Teachers Association, New Brunswick,  
New Jersey  
WETHERINGTON, JULIA, Division of Instructional Service,  
Department of Public Instruction, Raleigh, North Carolina  
WICKS, EVA, Earlington Heights School, Miami, Florida  
WILCOX, MILDRED D., Superintendent of Schools, Eau Claire  
County, Wisconsin

The following submitted pictures for use in illustrating  
the text:

BABIN, LARRY J., Superintendent of Schools, Ascension  
Parish, Donaldsonville, Louisiana  
BURDETTE, JAMES W., Head, Education Section, Soil Con-  
servation Service, Spartanburg, South Carolina  
DEBERNARDIS, AMO, Supervisor, Department of Audio-  
Visual Education, Portland, Oregon  
JOHNSON, CARL S., Coordinator, Conservation Education,  
Department of Education, Columbus, Ohio



JOHNSTON, EULA A., Elementary Supervisor, Hamilton  
County Department of Education, Chattanooga, Tennessee  
KAH, WILLIAM G., Division of Conservation and Natural  
Resources, Department of Agriculture, Columbus, Ohio  
KITCHING, FRANCES J., Anderson Junior High School, An-  
derson, South Carolina  
KRUTCH, CHARLES, Chief, Graphic Arts, TVA, Knoxville,  
Tennessee  
MATTISON, C. W., Forestry Education Consultant, U. S. De-  
partment of Agriculture, Washington, D. C.  
McCUSKEY, DOROTHY, Curriculum Coordinator, Depart-  
ment of Public Instruction, Madison, Wisconsin  
MITCHELL, MARY A., Director of Elementary Education,  
Newtonville, Massachusetts  
SHAW, LUELLE, Merrick Demonstration School, Coral  
Gables, Florida  
ULLIN, CHET, Director, Instructional Materials, Kitsap  
County, Bremerton, Washington



## CHAPTER QUOTATION REFERENCES

### Chapter I

Theodore Brameld, *Philosophies of Education in an Age of Crisis in School and Society*, Vol. 65, No. 1695, June 21, 1947, p. 452.

### Chapter II

Stuart Chase, *Rich Land, Poor Land*, p. 350.

### Chapter III

Erich W. Zimmerman, *World Resources and Industries*, p. 34.

### Chapter IV

Paul B. Sears, *This Is Our World*, p. 285-86.

### Chapter V

Robert Ulich, *History of Educational Thought*, p. 339.

### Chapter VI

George T. Renner, *Conservation of National Resources*, p. 212.

# List of Members

Association for Supervision and Curriculum Development  
For the year 1947-48

(Corrected to Oct. 15, 1947)

## ALABAMA

Andalusia  
Barnes, Derlie, Elementary Supervisor  
Box 950

Asheville  
McFaddin, Geneva, Supervisor  
St. Clair County

Auburn  
Irvine, Paul, Teacher Training  
Alabama Polytechnic Institute  
Leese, Joseph, Professor of Education  
Alabama Polytechnic Institute

Brantley  
Bentley, Florence, Supervisor  
Greenshaw County Elementary Schools

Brewton  
Holmes, Ethel, Supervisor  
Brewton Co.

Carrollton  
Fife, Pauline  
Box 188

Centre  
Smith, Estelle S.  
Box 35

Centreville  
Glover, Mary C., Supervisor of Instruction  
Board of Education

Clanton  
Schurter, Elsie, Supervisor  
Chilton County Elementary Schools,  
Box 132

Columbiana  
Campbell, Kayron, Elementary Supervisor  
Box 284

Cullman  
McClanahan, Alice, Elementary Supervisor

Decatur  
Hagerman, O. S., Supervisor of Instruction  
Decatur City Schools  
Hamilton, Mrs. E. G., Supervisor of Instruction  
515 East Walnut Street

Elba  
Farris, Eunora, Elementary Supervisor

Florence  
Clark, Mrs. T. E.  
801 Olive Street  
Comer, Louise  
807 Olive Street  
Kelly, Mae, Director  
Kilby Training School  
602 Morrison Avenue

Fort Payne  
Driskell, Vera Mae, Supervisor of Instruction  
Box 151

Geneva  
Fain, Lillie T., Supervisor  
Geneva County

Gladson  
Thompson, Louise G., Supervisor of Instruction  
P. O. Box 924

Greenville  
Crane, Rubye P., Supervisor  
Box 243

Guntersville  
Dilworth, Bernice, Elementary Supervisor  
Box 453

Williamson, Roosevelt, Principal  
Lakeview School

Hamilton  
Mixon, Lucille, Supervisor  
Marion County

Jasper  
Locke, Miriam A., Supervisor of Elementary Schools  
Board of Education

Mobile  
Booker, R. L., Principal  
Russell Elementary School  
1158 Gorgas

Jones, Lenore  
1606 Monterey Place

Patrick, Mayme  
108 S. Monterey  
O'Rourke, Pauline, County Supervisor  
Barton Academy

Monroeville  
Kirkland, Fay, Supervisor  
Monroe County Schools

Montevallo  
Dunn, Minnie, Assistant Professor  
Alabama College  
Hadley, Laura B., Associate Professor  
Home Economics Education  
Alabama College

Montgomery  
Garrison, Jessie R., Supervisor, Physical Education  
Alabama Department of Education  
Mathews, Paul W., State Supervisor of Music  
State Department of Education  
McCall, W. Morrison, Director  
Division of Instruction  
State Department of Education  
Smith, T. W., Assistant in Curriculum  
State Department of Education

Oneonta  
Tipton, Bess Fullerton, Supervisor  
Board of Education, Blount County

Opelika  
Shepard, Anna M., Supervisor  
415 N. 10th Street

Sulligent  
Harding, John C., Principal  
Box 38

Talladega  
Henderson, Mary C., Supervisor of High Schools  
Box 417

## Troy

Crump, Gladys, County Supervisor  
c/o L. D. Bynum  
Lucia, Mrs. Houston L., Supervisor Pike  
County Schools  
c/o Pike County Circulating Library  
Murphy, Esther, State Teachers College  
Smith, Ophelia Jane, Critic Teacher  
State Teachers College

## Tuscaloosa

Reynolds, Nellie D., Principal  
614 - 22nd Avenue  
Williams, Katie, Supervisor of Elementary Schools  
Tuscaloosa Board of Education

## Tuscumbia

Gilchrist, J. H., Principal  
Trenholm High School  
P. O. Box 418

## University

Belser, Danylu, Professor, Elementary Education  
Box 1476, University of Alabama  
Hammock, Robert C., Associate Professor  
Box 1028, University of Alabama  
Parton, Daisy, Associate Professor of Education  
Box 1882, University of Alabama  
Perry, H. Arnold, Associate Professor of Education  
University of Alabama  
Tidwell, R. E., Director of Extension  
University of Alabama

## Vernon

King, Anita, Supervisor  
Lemar County Elementary Schools  
Post Office Box 193  
Mastin, M. L., Dean  
Lemar County Training School

## ARIZONA

## Phoenix

Bailey, Lucille, Principal  
Wm. T. Machan School  
2140 East Virginia  
Frazier, Alexander, Curriculum Counselor  
Phoenix Junior College  
Pulliam, Nolan D., State Superintendent of Public Instruction  
212 Capitol Building

## Prescott

Mutchler, Alice  
505 Hassayampa  
Sheldon, Donald R., Superintendent  
Box 1231

## Tucson

Booth, Jonathan L., Administration Building  
10th and Park Avenues  
MacKay, J. L., Chief, Veterans Administration Guidance Center  
University of Arizona

## ARKANSAS

## Carlisle

Shannon, A. G., Superintendent

## Conway

Chrisler, Verna, Primary Supervisor  
Training School  
Teachers College  
McCue, Louise  
R. F. D. 2

## El Dorado

Swan, Charles E., Director of Elementary Education

## Fayetteville

Cross, Charles H., University of Arkansas  
Milton, Jennie Lou, College of Education  
University of Arkansas

## Fort Smith

Lee, Thomas L., Principal  
Peabody School  
South 21st. & Rogers Ave.  
Pahotski, Minnie, Primary Supervisor  
Fort Smith Public Schools  
Administration Building  
400 North 15th Street

## Huntsville

Blankenship, P. V., County Supervisor  
Box 248

## Little Rock

Owens, M. R., Director of Division of Instruction  
State Department of Education

## Mariana

Futrall, Alma, County Supervisor of Schools

## Pine Bluff

Dabney, Hazel L., Elementary Supervisor City Schools  
Peebles, Eula M., Itinerant Teacher  
Trainer  
Home Economics Education  
Agricultural, Mechanical and Normal College

## Russellville

Sherman, Ruth S., Director Teacher Training, Arkansas Polytechnic Institute  
1020 North Arkansas

## Wilson

Bird, C. L., Superintendent  
Wilson Public Schools

## CALIFORNIA

## Alameda

Grindstaff, Leonard, Director of Curriculum  
Alameda City Schools

## Albany

Woolworth, Wm. G., Curriculum Coordinator  
1269 Portland Avenue

## Alhambra

Bennett, Mabel C., Elementary Supervisor  
601 North Garfield Street  
Duryee, Hazel, 1st Grade Teacher  
204 North Electric  
Cole, Nelle Azell, Adult and Vocational Education  
25 Meridian

Crawford, Ruth, Elementary Art Supervisor

Alhambra Grade Schools  
Stokesbary, Maurice, Assistant Superintendent  
601 North Garfield Avenue

## Altadena

Salisbury, Frank S., Writer of Text-books  
1356 La Solana Drive

## Alturas

Naslund, Robert, General Supervisor  
County Court House  
Tierney, Hallie M., County Superintendent of Schools

## Anaheim

Upp, Lucia L., Art Supervisor  
303 North Philadelphia



- Arcata  
Cornelius, Sarah, Humboldt State College  
Fleming, Margaret, Director of Student Teaching  
Humboldt College
- Aromas  
Reed, Walter, Rural Supervisor
- Artesia  
Burnett, Madeline Land, Supervisor of Music  
Artesia Public Schools  
Hurley, Josephine E., Supervising Principal  
231 East 17th Street
- Atascadero  
Higgins, Ethel L., Rural Supervisor  
Box 142
- Auburn  
Hartsig, Barbara, Supervisor of Instruction  
296 California Street  
Lagenbach, Louise, General Supervisor  
Parsons, Charles F., Director, Audio-Visual Education, Public Schools  
Reeves, Hubert E.
- Bakersfield  
Dooley, Helen, Art Supervisor  
Courthouse  
Gould, Betty, Director of Attendance  
1600 K Street  
James, Katrine E., County Superintendent  
Schools Office  
Jerstad, Nina, Audio-Visual Supervisor  
1609 Haldon Street  
Kanne, Katherine, Audio-Visual Aids Supervisor  
Bakersfield City Schools  
1600 K Street  
Lynch, Helen M., Primary Supervisor  
1600 K Street  
Massey, Joyce, Art Supervisor  
County Superintendent, School Office  
Messinger, Ray, Supervisor  
Room 117, Courthouse  
Mills, Flossie E., Intermediate Grade Supervisor  
1600 K Street  
McGovern, Elsie, District Supervisor  
Neideffer, R. T., Director Elementary Education  
Administration Building, 1600 K St.  
Stager, Gladys, Librarian  
1600 K Street  
Administration Building
- Bellflower  
Orear, Margaret Louise, Director, Research and Guidance  
415 South Clark  
Boyer, Beatrice V., General Supervisor  
6145 North Clark Avenue
- Berkeley  
Alexander, Roxie E., Campus, University of California  
Haviland Hall  
Gifford, Myrtle, Chairman, Art Department  
Berkeley Public Schools  
1414 Walnut Street  
Grant, Jettye Fern, Supervisor, Primary Education  
1414 Walnut Street  
Jegi, Evelyn, Elementary Supervisor  
668 Coventry Road  
Kye, George, Professor of Education  
Haviland Hall, University of California
- Burlingame  
O'Neil, Agnes B., Music Supervisor  
701 Paloma
- Carmel  
Hull, Arthur, Supervising Principal, Box 202
- Chico  
Baker, Norma, Supervisor, Teacher Training  
Chico State College  
Crouch, Eleanor, Assistant Coordinator  
Chico City Schools  
Dumas, Enoch, Director  
Teacher Training  
Chico State College  
Straley, Ruth, General Supervisor  
Chico State College  
Wandling, Harry, Coordinator  
1065 East 7th  
Williams, Sara, Public Health Nurse
- Chula Vista  
Hause, Edna Mae, Primary Coordinator, Box 395  
Vandoren, Meta W., Orchestra Director  
Box 788
- Clearwater  
Robinson, Jack, Director, Elementary Education  
Box 140
- Colton  
Richmond, Mildred, General Supervisor  
863 North 7th Street
- Colusa  
Britton, Edward C., Director  
Colusa County School Project  
230 Sixth Street
- Compton  
Bowen, Wayne F., Treasurer, California Teachers Association  
403 South Tamarind Street  
Davison, Margaret, Director of Education Measurements  
117 West Cocoa  
Gandy, Jannie, Art Director  
701 South Sloan Avenue  
Wolf, Ruth, Supervising Principal  
1821 San Vincente

- Concord  
Spencer, Irene, General Supervisor  
700 Pleasant Hill Road
- Corona  
Bishop, F. E., District Superintendent  
of Schools  
Fresno State College
- Coronado  
Farnum, Martha T., Instructional  
Coordinator  
300 B Avenue
- Crescent City  
Johnson, Ray, Attendance and Record-  
ing Supervisor  
Pertle, Cartle, General Supervisor  
Crescent City Public Schools
- Culver City  
Chandler, Gladys L., Principal  
4053 Irving Place
- Delano  
Burum, Winifred, Curriculum Consult-  
ant  
P. O. Box 14
- Dinuba  
Keck, Clea  
345 East Tulare Street
- Downey  
Shingler, Muriel M., Supervising Prin-  
cipal  
347 South Paramount Boulevard
- Downville  
Clark, Evelyn A., Rural Supervisor
- El Cajon  
Graham, Margaret E., Principal  
Guyamaca School
- El Centro  
Christensen, Izzetta M., Supervisor  
Box 835  
Gibson, Carmen, Supervisor of Music  
Imperial County  
Kempley, Ruth A., Rural Supervisor  
Court House  
Upholt, Liefy V., Supervisor  
Court House
- El Monte  
Burkett, Elizabeth, Mountain View  
Schools  
Erwin, Susie R., Supervisor of  
Instruction  
P. O. Box 30  
MacLeod, Margaret, Director of  
Education  
415 California
- Escondido  
LeFevre, Frances, Escondido Union  
Elementary Schools
- Eureka  
Hansen, Oden, General Supervisor  
County Court House  
Hunter, Evelyn, Supervisor Child  
Welfare  
P. O. Box 18  
Kjer, Alice O. Supervisor  
737 Humboldt Street  
Thompson, Alma, General Supervisor  
County Court House  
Pingerton, Nene, Elementary Supervisor
- Fontana  
Tompkins, Eleanor Laurene, Art Super-  
visor and Assistant General  
Citrus and Valley
- Fort Bragg  
Cannon, Neva M., Rural Supervisor  
500 Harold Street
- Fresno  
Addicott, Irwin O., Assistant Super-  
intendent  
2348 Mariposa Street  
Boehm, Edwin, Supervisor Physical  
Education  
301 Hall of Records
- Brewster, Marjorie, Assistant Professor  
of Education  
Fresno State College
- Canfield, J. W., Director Teacher  
Placement  
Fresno State College
- Fraser, E. E., Assistant County  
Superintendent  
301 Hall of Records
- Glass, Syd, General Supervisor  
County Superintendent School Office
- Gorow, Frank, Audio-Visual Aids  
Coordinator  
County Superintendent School Office
- Johnson, Helen W., Music Supervisor  
Fresno County Superintendent Schools  
Office  
301 Hall of Records
- Maxwell, Mary B., Consultant, Fresno  
City Schools  
2348 Mariposa
- Munce, Tillie C., Primary Supervisor  
14 Glenn Avenue
- Smith, Frank H., General Supervisor  
301 Hall of Records
- Thomas, Margaret, Director Child  
Welfare  
2348 Mariposa Street
- Tobin, Ethel, Health Supervisor  
County Superintendent Schools Office  
301 Hall of Records
- Watkins, Ben H., General Supervisor  
301 Hall of Records
- Weems, A. D., General Supervisor  
301 Hall of Records
- Glendale  
Rowley, Marion, General Supervisor  
411 East Wilson Avenue
- Guadalupe  
Borad, Lucille S., General Supervisor  
115 A West Second St.
- Hanford  
Alexander, Vincent, Physical Education  
Supervisor  
Kings County Superintendent  
Schools Office
- Dalke, David, Supervisor, Attendance  
and Child Welfare  
307 West Ivy
- Goudie, Merrill  
123 Ninth Street
- Koske, Ione B., Music Supervisor  
e/o County Superintendent of Schools
- Mellor, Bethel  
311 Bush Street
- Mortensen, Ada, County School Nurse  
R. F. D. 1, Box 211
- Reinhard, Grace Stewart, Primary  
Supervisor
- Russell, Theresa, City Health Supervisor  
P. O. Box 71
- Hayward  
Borneman, Katherine H., Principal and  
Supervisor of Primary Schools  
8069 Castro Valley Boulevard
- Sampson, Mabel  
8132 Berdina Road
- Herlong  
Smith, Lawson, District Superintendent  
Herlong Elementary School
- Hollister  
Elliott, Lila, Rural Supervisor  
Court House
- Priest, George, General Supervisor  
58 Thomas Street
- Hollywood  
Richardson, Sybal K., Counselor,  
Elementary Schools  
2416 North Beachwood

- Independence  
Phelan, Arthur, General Supervisor  
County Court House
- Inglewood  
Cralle, Robert, City Superintendent of  
Schools  
8025 Maitland Avenue  
Moyes, Rhea, Principal  
2900 East Arbor Vitae  
Taft, Chester A., Director  
Child Welfare and Attendance  
Administration Building  
111 North Grevillea Avenue
- La Canada  
Maus, Jeanne A., Principal and Super-  
visor  
P. O. Box 66
- La Habra  
Elliot, Stephen, Elementary Curriculum  
Coordinator  
10012 East Central
- Lakeport  
Johnson, T. D., General Supervisor
- Long Beach  
Borden, Hilma, Assistant Elementary  
Supervisor  
1817 East 10th Street  
Connor, Isabel, Departmental Assistant  
744 Santiago Avenue  
Davis, Evelyn, Audio-Visual Supervisor  
270 Ravenna Drive  
Eaton, Vinnie Gee  
715 Locust Avenue  
Frishman, Harry  
715 Locust Avenue  
Goddard, Florence, Supervising Principal  
1121 Rose Avenue  
Griggle, Olga  
715 Locust Avenue  
Hagaman, Neva  
715 Locust Avenue  
Hanna, Lavone A., Supervisor of  
Curriculum Research  
715 Locust  
McCoy, William V.  
715 Locust Avenue  
McNutt, Marie  
5801 Gundry Avenue  
Oberholtzer, Kenneth, Superintendent  
715 Locust Avenue  
Poore, Shirley, Supervisor of Art  
715 Locust Street  
Administration Building  
Potter, Gladys L., Elementary School  
Supervisor  
715 Locust Street  
Reed, Minnie Lowery  
715 Locust Avenue  
Shearer, Elga M., Supervisor of  
Elementary Education  
3957 East 3rd Street  
Shouse, Mary  
715 Locust Avenue  
Thompson, Anton  
715 Locust Avenue  
Ware, Beulah  
206 Bennett Avenue
- Los Altos  
Harville, Mae W., Art Supervisor  
R. F. D. 2, Box 427
- Los Angeles  
Adams, Grace Lucille, General Super-  
visor  
1156 Longwood Avenue  
Anderson, Ida May, Art Supervisor  
Box 1671  
Angier, Edwin, Senior High Education  
Division  
Los Angeles City Schools  
451 North Hill
- Baldwin, Harmon, Personnel Division  
Los Angeles City Schools  
451 North Hill  
Beall, Jody Chloe, Cafeteria Branch,  
Elementary Education Division  
Los Angeles City Schools  
451 North Hill  
Beasley, Mary, Los Angeles City Schools  
808 North Spring Street  
Britton, Jasmine  
1205 West Pico Boulevard  
Burkhart, Kathryn, Curriculum Coordi-  
nator  
379 South Curson  
Byington, Barbara, Supervisor of  
Instruction  
521 South Commonwealth  
Carpenter, Dale  
Box 1671  
Chapin, Alice Carrie, Speech Correction  
Section  
Elementary Education Division  
Los Angeles City Schools  
451 North Hill  
Cassidy, Rosalind, Women's Physical  
Education Building  
University of California at Los  
Angeles  
405 Hilgard Avenue  
Chapman, A. M., Head Supervisor  
10950 Ohio Avenue  
Cogswell, M. Kathleen, Senior High  
School Educational Division  
451 North Hill  
Danielson, Cora Lee, Education for  
Exceptional Children  
Box 1671  
Danky, Elizabeth, Academic Branch,  
Curriculum Division  
451 North Hill  
Divizia, Margaret, Instruction Aids  
Branch, Curriculum Division  
451 North Hill  
Duggan, Janie P., Elementary Super-  
visor  
1111 West 60th Street  
Dutton, W. H., Director of Education  
Whittier College  
Epstein, Madeline, Supervisor  
Box 1651, Main Office  
Ferris, Charlotte, Curriculum Coordi-  
nator  
140 West 101st Street  
Finegan, Hazel Irene, General Super-  
visor  
317 South Palm Drive, Beverly Hills  
Fisher, Robert  
Personnel Division  
451 North Hill  
Grant, Adele Lewis, Science Supervisor  
6019 South Overhill Drive  
Hartshorn, William, Music Section  
1205 West Pico Boulevard  
Hebb, Frances Winifred, Supervisor of  
Speech  
1021 McDonnell  
Hill, Ollie, Central Division, Elementary  
Education Division  
451 North Hill  
Hockett, John A., Associate Director of  
Training  
Department of Education  
University of California  
405 Hilgard Avenue  
Holdridge, W. L., Elementary Education  
Division  
South District  
451 North Hill

- Kinney, Ernestine, Dean of Women  
1600 Campus Road  
Occidental College
- Koenig, Dorothy, Field Assistant, Los Angeles County  
1154 South Longwood Avenue
- Labbe, Regna Julien, Elementary Education Division  
West District Office  
451 North Hill
- Leever, Dale V.  
Box 1671
- Lewerenz, Alfred, Education Research and Guidance  
Box 1671
- MacLean, Archie, Academic Branch, Curriculum Division  
451 North Hill
- McNay, Allison J., Supervisor, Audio-Visual Aids  
Box 1671, Main Office
- Merkley, J. W., Senior High, Education Division  
451 North Hill
- Mitchel, Josephine, Music Supervisor  
808 North Spring Street
- Mohler, Ruth  
808 North Spring Street
- Molloy, Anna, Assistant Supervisor  
Library and Textbook Section  
Curriculum Division  
1205 West Pico Boulevard
- Mortenson, Helen, Supervisor, South District  
Box 1671, Main Office
- Page, Wallace W.  
9023 Olin Street, Palms Station
- Pfortner, Frances, Elementary Educational Division  
Central District Office  
451 North Hill
- Pixley, Erma, Supervisor  
1205 West Pico Boulevard
- Randall, Harriet, Auxiliary Service  
Division Health Education  
451 North Hill
- Redit, Edith, Supervisor of Instruction  
808 North Spring Street
- Reese, Dora J., Mount St. Mary's College  
12001 Chalon Road
- Rice, Helen M., Elementary Supervisor  
8919 Airplane Avenue
- Riese, Ella L., Personnel Division  
451 North Hill
- Risinger, Maude, Supervisor  
Box 1671
- Sanderson, Susie, Supervisor  
Box 1671
- Seeds, Corinne, Principal  
University of California  
Demonstration School
- Sheldon, Edna R., Attendance and Employment of Minors  
Box 1671
- Regis, Sister Mary  
2021 North Western Avenue
- Smallenburg, Harry, Director of Research  
808 N. Spring District
- Smith, Mary Elizabeth, Supervisor East District  
Box 1671, Main Office
- Stanchfield, Bessie, Curriculum Coordinator  
808 North Spring Street
- Stratton, Florence M., Assistant Supervisor, Curriculum  
3983 S. Van Ness
- Thomas, J. Herold, Attendance and Employment of Minors  
Box 1671
- Thomson, Charlotte, Food Services  
Central Elementary District Office  
1740 North New Hampshire
- Thrower, Georgeine, Supervisor  
1740 North New Hampshire
- Tolman, Paulyne, Supervisor  
Box 1671
- Tomblin, Allene, Elementary Education Division  
South District Office  
451 North Hill
- Trillingham, C. C., c/o Howardine Hoffman, Division Elementary Curriculum, Coordination and Supervision  
County Superintendent of Schools  
808 North Spring Street
- Waddell, Charles W., Professor  
Director Teacher Training, University of California at Los Angeles  
10630 Lindbrook Drive
- Waltz, Rosalie, Education Division, Junior High School  
451 North Hill
- Whitehouse, Lavon, Supervisor, West District  
Box 1671, Main Office
- Wiese, Edna L., Supervisor  
Box 1671
- Woods, Elizabeth L., Educational Research and Guidance  
Box 1671, Main Office
- Los Gatos  
Cass, George T., County Superintendent, Physical Education  
R. E. D. 2, Box 302
- Los Nietos  
Cryan, Mary M., Primary Supervisor
- Madera  
Cann, Margaret J., Health Supervisor  
c/o Office Superintendent County Schools
- Fitzsimons, Ethel, Primary Supervisor  
c/o County Superintendent Schools
- Gallant, Alice, Music Supervisor  
County Court House
- Lindemann, Maud E., Director of Curriculum  
c/o Superintendent of Schools Office
- Skelly, Harry, Audio-Visual Supervisor  
County Superintendent Schools Office
- Mariposa  
Fellows, George W., General Supervisor
- Martinez  
Kaar, Harold W., Director of Supervision  
840 Lafayette Street
- Leonard, Emily C., General Supervisor  
1026 Arlington Way
- Rea, Josephine, General Supervisor  
Contra Costa County  
Room 306, Court House
- Stegemen, William H.  
1120 Shell Avenue
- Webster, Jane, Speech Supervisor  
306 Court House
- Marysville  
McQuaid, Katherine R., Rural Supervisor, Yuba County  
411 7th Street
- Mead, Agnes Weber, County Superintendent
- Merced  
Bradford, Leone, Supervisor of Music  
P. O. Box 1007



- Knapp, W. A., General Supervisor  
c/o Office Superintendent, County  
Schools
- Martin, Eleanore C., General Supervisor  
46 - 18th Street
- Robbins, Rintha, General Supervisor  
219 - 27th Street
- Sherer, Lorraine M., Consultant in Edu-  
cation  
Stanislaus County Schools
- Modesta  
Annear, Mrs. M. L., County Superin-  
tendent of Schools  
Box 1038
- Davis, Georgia, County Supervisor  
Office of County Superintendent
- Hoyt, C. Russell, General Supervisor  
235 Garden Avenue
- Kentor, Frances  
1133 - 13th Street
- Pratt, Meriam L., General Supervisor  
602 La Loma
- Sanders, Mary F.  
724 Burney
- Zumwalt, Gladys, General Supervisor  
403 McHenry
- Montebello  
Freese, Theron, Assistant Superintendent  
123 South Montebello Boulevard
- White, Madeline  
305 Pickering Way
- Monterey  
Covell, Eldon J., General Supervisor  
1195 Franklin Street
- Montrose  
Brown, Wm. B., Supervisor In Service  
Training  
2711 Piedmont Avenue
- Napa  
Boden, Marie A., Supervisor, Health  
and Attendance  
221 Homewood
- Devers, Nancy O., Supervisor  
P. O. Box 215
- Nevada City  
Bergren, Vivian, Nurse
- Goode, Louise H., General Supervisor  
c/o County Superintendent
- Newcastle  
Conner, Muriel, Music Supervisor
- Oakdale  
Buchanan, Florence  
Box 352
- Oakland  
Baxter, Bernice, Coordinator of Instruc-  
tion  
1025 Second Avenue
- Benton, Ed, Research and Guidance  
Department  
2936 Rawson Street
- Boyd, Jessie E.  
609 Kenyon Road
- Choate, Robert, Music Supervisor  
School Administration Building
- Cowan, Persis Hamilton  
5837 Snake Road
- Coyner, Ilean, Assistant in Instruction  
5142 Bond
- De Jean, Marguerite, Assistant in Art  
1025 Second Avenue
- Ehret, Paul D., General Supervisor  
402 Broadway
- Flesson, Romona, Art Supervisor  
5660 Oceanview Drive
- Kiley, Lorene, Supervisor, Grades 5-8,  
Visual Education  
1715 High St.
- Lucas, Frank, Assistant in Research  
440 Broadway
- Lykins, Lee T., Supervisor of Music  
Court House
- Martin, Vibella, Associate Director  
Curriculum Laboratory  
636 Hillgirt Circle
- McAvoy, Eunice, Supervisor of Speech  
365 Hanover
- Mead, Nelle M., Supervisor Grades 1-4  
216 Athol Avenue
- Mitchell, Audrey  
3050 Richmond Boulevard
- Ott, Eva, Principal  
5850 Birch Court
- Pinckney, Paul W., Principal  
Oakland High School
- Reid, Virginia  
1025 Second Avenue
- Robison, Eleanor, Assistant in Instruc-  
tion  
5850 Birch Court
- Ryan, E. Lunney  
159 Lake Street, Apt. #23
- Schoelkopf, Alice, Art Supervisor  
1918 Lakeshore
- Schoenfeld, Harold, Coordinator Physi-  
cal Education  
County Court House
- Seidel, Vaughn D., County Superin-  
tendent  
Court House
- Ward, Ethel S., Supervisor and Gen-  
eral Coordinator of Courses  
Alameda County Board of Educa-  
tion
- Wilson, Leonore F., Assistant Professor  
of Education  
Mills College
- Wulfling, Gretchen, Director of Elemen-  
tary Education  
1025 Second Avenue
- Ontario  
Andres, Edna E., Elementary Supervisor  
Box 313
- Rasmussen, Anne  
124 Bonnie Brae Court
- Steigler, Sylvia F., Art Supervisor  
118 West J Street
- Oroville  
Downing, Lovell C., General Supervisor  
P. O. Box 203
- Jans, Raymond, Supervisor Child Wel-  
fare
- Jeidy, Pauline, General Supervisor  
Johnson, Loaz, Curriculum Coordinator  
Office of Superintendent
- Newton, Elda Mills, Assistant Superin-  
tendent  
County Court House
- Schwartz, Anna L., Court House Annex
- Pacific Grove  
Dyke, Elmarie H., Rural Supervisor  
Box 300
- Pacific Palisades  
Read, Helen Sue, Supervisor 2nd Grade  
533 Mt. Holyoke Avenue
- Palm Springs  
Carey, Eileen, Principal  
538 North Palm Canyon Drive
- Palo Alto  
Henry, Paul H.  
523 Donohoe Street
- Krug, Edward, Associate Professor of  
Education  
Stanford University
- Lang, Arch D., Graduate Student  
520 O'Connor Street
- Ormsby, Lella Taggart  
678 Mirada, Stanford University

## Pasadena

Effinger, Elizabeth, Art Supervisor  
1500 East Villa Street  
Fox, Lillian Mohr, Supervisor, Elementary Music Education  
1501 East Villa Street  
Haworth, Harry H., Supervisor, Library Visual Aids  
1501 East Walnut Street  
Hoffman, Howardine G.  
333 Anita Drive  
Howell, Youldon C., Director of Art Education  
215 West Montana  
Jenkins, Marian, Coordinator  
34 South Mentor Avenue  
Markell, Ruth, Supervisor of Music  
1147 Lincoln Avenue  
Meridith, George H., Deputy Superintendent  
1501 East Villa Street  
Newby, Ruth, Acting Curriculum Coordinator  
527 East Washington Street  
Swatzel, Dorothy, Assistant, Elementary Curriculum Department  
320 East Walnut Street  
Sexton, John A., Superintendent  
1501 East Villa Street  
Piedmont  
Hole, Katharyn, Supervisor of Art  
784 Kingston Avenue

## Pixley

Terry, John Gayer, District Superintendent  
P. O. Box 408  
Placerville  
Reese, Dan H., Director, Audio-Visual Education  
25 Clay Street

## Pomona

Lorbeer, Virginia L.  
420 East Pasadena

## Porterville

Aldridge, Ralph, Supervisor of Physical Education  
R. F. D. 1, Box 147-A  
Bailey, Iva M., Elementary Curriculum Instructor  
812 Hackett Street  
Terwilliger, Leafy, Art Director  
523 West School Street

## Quincy

Brothers, Mayme, General Supervisor  
Red Bluff  
Kerber, Ruth G., County Superintendent  
Tehama County  
Minch, Grace D., General Supervisor  
c/o Office, County Superintendent of Schools

## Redding

Bean, Minnie D., General Supervisor  
Shasta County  
Hunt, Ann, Art Supervisor  
Public Schools  
Hunt, Lucy, Superintendent of Schools  
Shasta County  
Keagy, Fin H., Supervisor  
Box 189

## Redlands

Roberts, Genevieve, Home Teacher  
Allen, William H., Supervisor  
223 West Olive Street  
Carlton, Dean R., Elementary Principal  
624 Monterey Street  
Turner, Lucille, 6th Grade Teacher  
622 Glenwood Drive  
Hidden, Elizabeth, Associate Professor  
of Education  
404 Cajon Street

McCollister, Edith, Director Elementary Music

Croy, Hazel Miller, Supervising Principal

McIlhenny Road

Severns, Joe

R. F. D. 1, Box 37 A

Tolle, Vernon O.

729 South Bucna Vista

## Redwood City

Abbott, Pansy Jewett, County Superintendent of Schools

Court House

Collins, Eleanor Freeman, Director of Curriculum

c/o Superintendent, County Schools

Hale, Henry, Assistant Superintendent

Court House

Montgomery, Lois, Assistant Supervisor

Court House

Moritz, Irene, Director of Research

Court House, San Mateo County

Works, Charlotte, Music Supervisor

c/o County Superintendent of Schools

## Richmond

Beck, Lois G., Supervisor

Richmond Public Schools

1108 Bissell Avenue

Cameron, Christina B., Assistant Superintendent of Schools

Administration Building

Helms, Walter T., City Superintendent

of Schools

Hill, Ivan W., Director of Recreation,

421 Western Drive

Hill, Ruby L., Supervisor of Junior

High and Elementary Education

421 Western Drive

Lowden, Mary, Supervisor of Elementary School

Box 1352

Pennington, Pearl

621 - 17th Street

Schussman, Myron H., Principal

Washington School

308 W. McDonald Avenue

Smith, Irving W.

P. O. Box 1352

Wuerth, Ruth, General Supervisor

1108 Bissell Avenue

## Riverside

Bailey, Edna E., Supervisor

3891 - 10th Street

Frost, Nellie, Rural Supervisor

Riverside County Courthouse

Gibson, Frank, Supervisor Physical Education

Court House

Hord, Florence Norse, Supervisor of Art

Riverside County

Nance, Afton, Primary Supervisor,

County Schools

Court House

O'Laughlin, Lou, Art Supervisor

Court House Building, c/o County

Superintendent of Schools

Paterson, Elsie, Attendance Supervisor

Court House

Prouty, Patricia, Music Supervisor

4440 Lemon Street

## Sacramento

Bender, Ray, Director of Audio-Visual

Fields, Ralph, Associate Superintendent

Library and Courts Building

State Department of Education

Hogan, Ursula, Primary Supervisor

3021 E Street

Kitch, Donald E., State Department of

Education

Library and Courts Building

- Lonsdale, Bernard, Acting Chief,  
 Director of Elementary Education  
 State Department of Education  
 Noel, Frances W., Audio-Visual Aids  
 Division Audio-Visual Education  
 State Department of Education  
 O'Rourke, Everett V., Assistant Chief  
 Division of Secondary Education  
 State Department of Education  
 Perrin, Della M., Consultant  
 Early Childhood Education  
 State Department of Public Instruc-  
 tion  
 Simpson, Roy E., State Superintendent  
 State Department of Education  
 Library and Courts Building  
 Wiles, May B., Primary Supervisor  
 c/o Office Superintendent of County  
 Schools  
 Room 301, Court House  
 San Bernardino  
 Landon, Joseph W., Supervisor of Music  
 799 "F" Street  
 Middup, Irma G., Art Director  
 1261 E Street  
 Murray, Katherine, Supervisor of In-  
 struction  
 1578 Arrowhead Avenue  
 Poppett, Carol, Supervising Principal  
 County Court House  
 Simpson, Vera, Rural Supervisor  
 726 Arrowhead Avenue  
 Sischo, Doris J., Acting County Super-  
 intendent of Schools  
 County Court House  
 Sughrue, Lava, Director, Elementary  
 Education  
 2808 Stoddard Avenue  
 c/o Office Superintendent City  
 Schools  
 Wolf, Beulah Paul, Director of Rural  
 Education  
 2107 Mt. View  
 San Diego  
 Drag, Francis L., Director of Cur-  
 riculum, San Diego County Schools  
 Rm. 209, Civic Center.  
 Ellis, Joy H., Elementary Coordinator,  
 1253 University Avenue  
 Erdt, Margaret, Supervisor of Art  
 835 - 12th Avenue  
 Erro, Mercedes, Elementary Coordinator  
 3286 Bayside Walk  
 Evans, Laura Katherine, Elementary Co-  
 ordinator  
 1253 University Avenue  
 Fox Robert S., Curriculum Coordinator  
 209 Civic Center  
 Griffiths, Civa, Specialist in Speed  
 and Hearing  
 San Diego County Schools  
 209 Civic Center  
 Irish, Betty H., Elementary Coordinator  
 1253 University Avenue  
 Jameson, Barbara, Music Education Co-  
 ordinator  
 4319 1/2 - 40th Street  
 Moore, Helen Frances, Elementary Co-  
 ordinator  
 1253 University Avenue  
 Paradise, Margaret, Elementary Co-  
 ordinator  
 209 Civic Center  
 Redt, Margaret, Supervisor of Art Edu-  
 cation  
 825 - 12th Avenue  
 Southworth, Earl, Secondary Coordinator  
 1253 University Avenue, San Diego  
 County Schools  
 Thompson, Olive L., Elementary Coordi-  
 nator  
 3532 Indiana  
 Wooten, Richard C., Secondary Co-  
 ordinator  
 1253 University Ave.  
 San Francisco  
 Allcutt, Alice, Supervisor, Kindergarden  
 & Primary  
 San Francisco State College  
 Anderson, Cecilia, San Francisco State  
 College  
 380 Magellan Avenue  
 Brown, Doris Marjorie, Frederic Bunk  
 Training School  
 San Francisco State College  
 124 Buchanan Street  
 Cowan, Bill, San Francisco State College  
 Harris, Alta, General Elementary Super-  
 visor  
 Board of Education,  
 Heltibridge, Mary E., Supervisor  
 21st Infantry Regiment  
 APO 24 c/o Postmaster  
 Holland, Margaret, Supervisor, Guidance  
 and Counseling  
 Civic Auditorium  
 Irwin, Susan Bentean, General Super-  
 visor  
 555 Buena Vista  
 Kendall, Glenn, Chairman, Division of  
 Education and Psychology  
 San Francisco State College  
 Largent, Lydia, Art Supervisor  
 93 Grove Street  
 Leathurbury, Grace C., Principal,  
 Frederick Burke School  
 Leonard, J. Paul, President,  
 San Francisco State College  
 McCarthy, Mary C., Elementary Super-  
 visor  
 701 Paris Street  
 McMillian, Doris A., Supervisor of Art  
 750 Eddy Street  
 Murphy, Edith, Director, Home Eco-  
 nomics  
 93 Grove Street  
 Ormby, George, San Francisco Teachers  
 College  
 Parker, J. C., Director, of Curriculum,  
 Board of Education  
 Civic Auditorium  
 Conciline, Sr. Mary, R.V.M., Supervisor  
 2250 Franklin Street  
 San Gabriel  
 Duecker, Lois Mary, Supervisor  
 522 Padilla Street  
 Walter, R.B., Chief Deputy and County  
 Superintendent  
 434 North Del Mar  
 San Jose  
 Downing, Walter, Director of Guidance  
 408 Almaden Avenue  
 De Groot, Grace C., General Supervisor  
 Hall of Records  
 Goldsworthy, Philoma, Supervisor of Art  
 408 Almaden Avenue  
 Gordon, Lola Fay  
 466 North Second Street  
 Hansen, Botilda J., General Supervisor  
 Santa Clara County Schools  
 Hall of Records  
 Hubbard, O. S., Curriculum Coordina-  
 tor of Secondary Schools  
 Hall of Records  
 Jensen, Harry T., Assistant Professor  
 of Education  
 350 South 14th Street

- Lanyon, Frances, Director of Elementary Curriculum  
408 Alamaden Avenue
- Mason, Chester W., Supervisor, Musical Education  
22 Asbury Street
- Moffitt, Helen E., General Supervisor  
12 South 21st Street
- Morrison, Emma V., Director Elementary Curriculum  
Hall of Records
- Shipp, F. T., Abraham Lincoln High School
- Willey, Deverl, Department of Education  
San Jose State College
- Zinghem, Mary Louise, Director Industrial Aids  
408 Alamaden Avenue
- San Leandro  
Garcia, Alys Clare, Coordinator  
451 Hepburn Street
- San Lorenzo  
Gansberger, Dorothy  
102 Lewelling Boulevard
- San Luis Rey  
Kennecally, Finbar, Professor  
San Luis Rey Seminary, The Old Mission
- San Marino  
Doak, Helen P., Supervisor, Instruction  
755 La Mirada Avenue
- Hood, Jane, Coordinator, University of Southern California  
1745 Bedford Road
- San Rafael  
Lappe, Maxine D., Supervisor, Child Welfare and Attendance  
P. O. Box 454
- Maguire, Mildred E., Rural School Supervisor  
Office County Superintendent of Schools
- Mays, Eloise, General Supervisor  
Box 223
- Santa Ana  
Geddes, Mabel, Supervisor of Health  
312 Court House
- Glines, Dora P.  
R. F. D. 1, Box 559
- Melka, Katherine, Elementary Art Supervisor  
2205 Greenleaf
- Miller, Elizabeth, Consultant, General Education  
1104 West 8th Street, County Schools Office
- Perry, Evadna Kraus, Art Consultant  
502 East Myrtle
- Schoepfle, Irene, Consultant, Music Education  
Court House Annex
- Santa Barbara  
Hill, Margaret F.  
170 Patterson Avenue
- Houx, Kate, Supervisor of Instruction  
Santa Barbara County School  
Court House
- Lindquist, Rudolph D., Superintendent of Schools  
1235 Chapala Street
- Mickelson, Esther  
329 West Micheltorena
- Murray, Josephine  
1235 Chapala
- Noyes, E. Louise, Head, English Department  
425 Stanley Drive, Samarkand Hills
- Rademacher, Eva, Director Elementary Education  
Santa Barbara County Schools Office
- Ramsberger, Marguerite, County Court House
- Walker, Kenneth E.  
Apt. #7  
7 East Valereo Street
- Santa Cruz  
Byer, Maude Gerrior, Supervisor, Vocal Music  
23 - 2nd Street
- Hass, C. G., Director, Pacific Coast Bureau of Inter-Cultural Education  
Box 260
- Keesler, Dean  
P. O. Box 593
- Lee, Mina, Rural Supervisor
- Thornely, Doris M., Supervisor, Child Welfare and Attendance  
Box 316
- Santa Monica  
Bose, Roy G., Director Research and Guidance  
1333 Sixth Street
- Cox, Vivian, Supervisor of Instruction  
1213 Pine Street
- Morgan, Evan M., Curriculum Counselor  
1333 Sixth Street
- Siddell, Mae Knight, Music Supervisor  
1333 Sixth Street
- Santa Paula  
Martin, Elsie M., Classroom Teacher, Isbell School  
615 Santa Paula Street
- Nelson, Frances, Elementary Supervisor  
631 A. Virginia Terrace
- Pierce, Thelma, Elementary Supervisor  
630 Main Street
- Santa Rosa  
Combs, Julia E., Director Tests and Measurements  
P. O. Box 404
- Fennemore, Dora, Director of Tests  
Box 404
- Gerholdt, Anna, General Supervisor  
715 Mendocino Avenue
- Greene, Marian C.  
1216 - 13th Street
- Merritt, Edith P., General Supervisor  
613-A Benton Street
- Penn, Carl, Rural School Supervisor  
1119 Morgan Street
- Peterson, Mayme, Supervisor  
Box 271
- Shafter  
Bartlett, Beulah D., Director of Curriculum  
640 California, Box 723
- South Pasadena  
Palm, Ruben R., Secondary Coordinator  
2041 Hanscom Drive
- Robinson, Mardelle, Elementary Supervisor  
1809 Gillette Crescent
- Springer, Florence, Elementary Counselor  
603 Grand Avenue
- Stanford University  
Van Patten, Nathan  
c/o Stanford University Library
- Stockton  
Bowman, Carrie, Administrator  
324 San Joaquin
- Bryant, Beatrice D., Music Supervisor  
320 Regent Court
- Dalander, Eva C., Superintendent, Child Welfare  
1240 North Hunter



- Davis, Mrs. Gilbert, Supervisor  
 2626 Westminster Avenue  
 Declusin, Ruth, General Supervisor  
 Court House  
 Esser, Birdie M., General Supervisor  
 1030 Baker Street  
 Esser, Edward S., Supervisor  
 1030 North Baker  
 Foley, Martha Chess, Audio-Visual Aids  
 Supervisor  
 County Superintendent School Office  
 Lewis, Hazel M., Director of Research  
 324 North San Joaquin Street  
 Standerfer, Doris, Washington School  
 Strain, Oma, Art Supervisor  
 324 North San Joaquin  
 Sunny Vale  
 Paolo, Mildred D., Vice Principal  
 Sunnyvale Elementary School  
 Susanville  
 Berglund, Gladys H., General Supervisor  
 Public Schools  
 King, Ben F., Director, Audio-Visual  
 Education  
 County Superintendent of Schools  
 Office  
 Martin, Grace E., General Supervisor  
 701 Pine Street  
 Mitchell, Bernice, General Supervisor  
 Lassen County Schools  
 Wood, Helen Cowan  
 Court House  
 Sutter Creek  
 Garrison, Muriel A., General Supervisor  
 Box 314  
 Temple City  
 Manshardt, Clarice E., Director of Cur-  
 riculum  
 2048 East Longden Avenue  
 Ukiah  
 Byrnes, Margaret  
 Box 237  
 Dietterle, George R., Secondary  
 Curriculum Coordinator  
 711 Willow Avenue  
 Leonard, F. R., Rural Supervisor  
 Vallejo  
 Barger, Anita, Elementary Supervisor  
 1350 Louisiana Street  
 Stockwell, Vista, Supervisor  
 1112 Florida Street  
 Ventura  
 Kranz, Helen, Rural Supervisor  
 2451 Lexington  
 Moore, Maurine L., Supervising Coordi-  
 nator  
 Box 851  
 White, Joseph F., Director of Visual-  
 Education  
 Box 851, Education Building  
 Wisely, Edna  
 453 South Anacapa Street  
 Victorville  
 Alplana, Sarah, Elementary Supervisor  
 Box 772  
 Visalia  
 Beach, Allen W., General Supervisor  
 Box 133, R. F. D. 1  
 Brown, Doris, Primary Supervisor  
 820 S. Locust Street  
 Hamm, Katherine  
 Box 911  
 Heitz, Grace, General Supervisor  
 County Superintendent Schools Office  
 Court House  
 Kirkegaard, Lily H., Music Supervisor  
 P. O. Bin 911  
 Tanteau, Louise Brier  
 P. O. Box 911  
 Wasco  
 Burke, Teresa, Curriculum Director  
 Wasco Elementary Schools  
 Weaverville  
 Bart, Anna Marie  
 Whittier  
 Carbert, Charlotte, Supervisor Instruc-  
 tion  
 630 North Painter  
 Cooper, Ethel H., Art Supervisor  
 322 West Beverly Boulevard  
 Willows  
 Camper, Ralph, Rural Supervisor,  
 Glenn County  
 Woodland  
 Bigelow, Lois, Supervisor  
 Chapman, Robert, Court House  
 Gunter, Miriam  
 631 First Street  
 Kaartinen, Inez, General Supervisor  
 516 1st Street  
 Jensen, Gerald L., Secondary Coordi-  
 nator  
 48 North College Street  
 O'Rourke, E. V., Curriculum Coordi-  
 nator  
 Court House  
 Yreka  
 Burke, Francis, General Supervisor  
 County Court House  
 Deering, E. R.  
 Esrey, Margaret M., Supervisor  
 Box 336  
 Evans, Paul  
 General Supervisor, Siskiyou County  
 Reincke, Lawrence, Supervisor, Child  
 Welfare  
 c/o School Office

## COLORADO

- Boulder  
 Buchanan, J. H., Superintendent  
 Boulder Public Schools  
 Douglass, Harl, Director of Education  
 University of Colorado  
 779 - 16th  
 Mehl, Marie, Instructor, Elementary  
 Education  
 1129 - 11th Street  
 Colorado Springs  
 Burbrink, Teresa M., Supervisor, Physi-  
 cal Education  
 1412 East Pike Peak  
 Hamilton, Dwight, Director Elementary  
 Curriculum  
 411 Columbia Road  
 Piccinati, Jay G.  
 1437 North Nevada Street  
 Threlkeld, Harold H., Principal  
 Colorado Springs High School  
 Denver  
 Adams, Elsie W.  
 1640 Jackson  
 Ahrens, Maurice, Supervisor  
 414 Fourteenth Street  
 Alden, Ruth Viola  
 1530 Grant  
 Alphin, Helen, Supervisor, Denver Pub-  
 lic Schools  
 414 - 14th Street  
 Anderson, Ruth H.  
 1035 Monaco Parkway  
 Armstrong, C. E. Jr., Supervising  
 Teacher  
 251 South Washington Street  
 Arnold, Leta, Elementary Principal  
 3715 Osceola Street

Asfahl, W. D., Principal  
3140 East Iliff Avenue  
Biddick, Mildred  
1561 South Emerson Street  
Bostwick, Prudence, Supervising Teacher  
Denver Public Schools  
414 - 14th Street  
Byrne, Helen, Teacher, Grade 6  
726 South Yorke Street  
Carey, Nina  
865 South Penn  
Fox, Guy, Director, Department Pupil  
Personnel  
414 Fourteenth Street  
Gebhart, Orthia  
1590 South Ogden  
Goldman, Edythe, Principal, Smedley  
Elementary School  
1570 Fairfax Street  
Gumlick, Helen R., 414 - 14th Street  
Harper, Florence S., Social Science  
Teacher  
121 South E 16th Avenue  
Hays, Catherine Downes, Principal,  
Boettcher School  
1000 South Steele Street  
Henry, Edith M., Principal, Wyatt,  
School  
700 Cherry Street  
Hill, Wilhelmina, Associate Professor of  
Education  
University of Denver, University Park  
Holmes, Chrystal  
1732 Grant Street  
Holmes, Ethel E., Principal Wyman  
School  
2610 South Sherman  
Kane, Anna E., Elementary Teacher  
2632 Cherry  
Kneidler, Irene Macke  
1469 William, Apt. F  
Lewis, Arthur J., Jr.  
2128 South Humboldt  
Miles, Helen E.  
1555 Glencoe Street  
Noce, Lillian, Principal  
3726 Vallej Street  
Rishel, J. B., Principal  
Barnum School  
West 1st & Hooker Street  
Roberts, Helen M., Teacher, Horace  
Mann Jr. High School  
636 Madison St.  
Roberts, Madeline  
1332 Grant, Apt. 4  
Slavens, Leon E., Principal  
1315 Grape Street  
Sparhawk, Elizabeth  
336 Marion  
Yordy, Alvin R.  
130 South Lafayette  
Englewood  
Coxe, Charles  
4010 South Delaware  
Jenkins, R. D., Superintendent  
Englewood High School  
Sugarman, Myrtle Finn  
3049 South Lincoln  
Staats, Pauline G., Principal, Elementary  
Schools  
3000 South Bannock  
Walther, Herbert K.  
3894 South Sherman Street  
Fort Collins  
Coleman, Geneva E., Director, Instruction  
Administration Offices, Junior High  
Building  
Greeley  
Yardley, Hattie F., New Junior High  
School

Gunnison  
Dynes, John J., Chairman, Division of  
Education and Psychology  
Western State College  
Las Animas  
Pickens, T. H., Co.  
Bent County High School  
Pueblo  
Collins, Roy N., Supervisor of Music  
Education  
Pueblo Public Schools  
Hall, Dorothy M., Elementary Principal  
703 Polk  
Harbison, Sophia Ann  
Jordan Apts.  
Kirk, Paul L.  
119 Colorado Avenue  
Thatcher  
Strauel, Harold A., Superintendent and  
Principal  
Trinidad  
Botteman, L. J., Superintendent  
High School Building  
Walsenburg  
Andrews, S. M.  
Box 742  
Gore, W. R., Superintendent, High  
School  
406 Penn  
Westminister  
Coy, S. Clay, Superintendent of Schools  
School District #50

## CONNECTICUT

Bridgeport  
Reed, Nona B., Elementary Supervisor  
1211 Fairfield Avenue  
Roth, Frederick G., Principal  
Bassick High School  
Tompkins, Harriett D., Primary Super-  
visor  
528 Wood Avenue  
Derby  
O'Hara, James L., Derby High School  
Enfield  
Sister Mary Laura, Supervisor  
1335 Enfield Street  
Fairfield  
Sofejko, Jennie, Supervisor  
135 Brookside Drive  
Hartford  
Foberg, Ann, State Department of  
Education  
Kent  
Whitman, Hollis, Principal  
Manchester  
Cranstrom, Esther, Supervising Principal  
Green School  
Moodus  
Fisher, Royal O., Principal, Nathan Hale  
& Ray School  
Box #1  
New Haven  
King, Lois J., Supervisor, Student  
Teaching  
New Haven State Teachers College  
2 Howe Street  
Larson, Viola M.  
5 Jefferson Street  
Schwartz, Pauline P.  
84 Howe Street  
Pomfret Center  
Nychis, Peter V., Instructor  
Greek Theological Seminary  
Stamford  
Condon, Anna A., Elementary School  
Principal  
John J. Ryle School  
74 Garden Street

## Storrs

- Anderson, Vernon E., School of Education  
University of Connecticut  
Blaha, M. Jay, Psychologist & Coordinator  
University of Connecticut  
Gruhn, William T., Professor of Education  
University of Connecticut  
Thut, I. N., Associate Professor  
Box #9

## Stratford

- Almony, Viola K., Director of Elementary Education  
Board of Education  
Chaffe, Charles E., Superintendent of Schools  
High School Building

## Thompsonville

- Lyons, John H.  
Box 142

## Torrington

- McMahon, Mary M., Principal  
57 Turner Ave.

## Waterbury

- Fagan, Anna E., Director Curriculum Research  
35 Herkimer Street

## West Hartford

- Light, N. Searle, Director, Bureau of Supervision  
146 Ridgewood Road

- Wathley, Rose J., Elementary Supervisor  
51 Memorial Road

## Wethersfield

- Fuller, Harvey, Superintendent of Schools  
200 Main Street

## Wilton

- Mann, Geraldine, Supervising Principal  
Center School

## DELAWARE

## Lewes

- Houston, Bernice D., Lewes High School  
Moore, James A., Administrative Assistant  
311 Market Street

## Middletown

- Lecrone, Ellis K., Supervising Principal  
Middletown School

## Milton

- Evans, Lemuel H.

## Newark

- Armstrong, W. E., Coordinator  
University of Delaware Campus  
Ehlers, Emma C., Assistant Professor of Education  
University of Delaware

- Stradley, Elsie W., Teacher, Kirkwood School  
Elliott Heights, R. F. D. 2

## New Castle

- Kleckner, Joseph R., Superintendent  
New Castle Special School District

## Rehoboth

- Vansant, J. A., Superintendent  
Rehoboth Special School District

## Stanton

- Little, Lora H., Principal  
Stanton School—Box 17

## Wilmington

- Burnett, Marguerite H., Director, Curriculum Development  
Board of Education Building  
Cornell, Ruth E.,  
1806 Van Buren Street

- Dennison, Mary C., Principal  
George Gray School  
22nd & Locust Streets

- Heck, Phyllis Mason, Supervisor, Rural Schools  
Delaware Trust Building  
Rms. 220-221

- Holley, Ella J., State Supervisor  
Room M-221, Delaware Trust Building

- Hoyle, Dorothy, Viceprincipal

- Friends School

- Johnson, Catherine S., Viceprincipal

- 1718 North Broom Street

- Keller, Earl R., Supervising Principal

- 9 Cedar Avenue (Roselle)

- Laker, Sara M., 1st Grade Teacher

- 124 West 38th Street

- Lyman, Lela A., Supervisor of Mathematics

- Wilmington High School

- Riggin, M. Grace

- 437 South Union Street

- Taliaferro, J. A., Principal

- 199 Du Pont Highway

## WASHINGTON, D. C.

- Allen, Rowanetta S., Elementary Supervisor

- 5800 Temple Hill Road, S.E.

- Amidon, Edna P., Chief, Home

- Economics Education Service

- U. S. Office of Education

- Anderson, Howard H.

- U. S. Office of Education

- Arnes, Ella D., Administrative Principal

- Benning Schools

- Beust, Nora, Senior Specialist of Li-

- brary Materials

- 3133 Connecticut Avenue

- Blough, Glenn, O.

- U. S. Office of Education

- Bowes, Fern H.

- 5812 Nevada Avenue, N. W.

- Bull, Evelyn L.

- 3905 Davis Place, N. W.

- Bush, Grace, Principal

- 922 F Street N. E.

- Clark, Eugene A., President

- Minor Teachers College

- Georgia Avenue & Euclid St., N. W.

- Clark, Lois M., Advisor, Elementary

- Education Division

- 1201—16th Street N. W.

- Coon, Beulah I.

- U. S. Office of Education

- Cooper, Shirley, Assistant Director,

- Rural Service, NEA

- 1201 Sixteenth St. N. W.

- Davis, Mary Dabney, Specialist,

- Lower Elementary Education

- U. S. Office of Education

- Dore, Bernadette L., Principal

- 2725—31st Street N. W.

- Duckett, L. A.

- 24 O Street, N. W.

- Fox, James Harold, Dean, School of

- Education

- George Washington University

- Franzeth, Jane

- U. S. Office of Education

- Fryer, Thelma E., Principal

- J. R. Keene School

- 3051 Idaho Ave. N. W.

- Gabbard, Hazel F., Specialist, Parent

- Education

- U. S. Office of Education

- Gaffney, Virginia Staub  
3136 Que Street N. W.  
Goodykoontz, Bess, Director, Division of  
Elementary Education  
U. S. Office of Education  
Hager, Walter E., President  
Wilson Teachers College  
11th & Harvard Streets, N. W.  
Halberg, Anna D., Head, Division of  
Education and Psychology  
Wilson Teachers College  
1701 Massachusetts Avenue  
Harris, F. Lucille  
3815 Seventh St. N. W.  
Haworth, Ellis, Professor of Science  
Wilson Teachers College  
11th & Harvard Streets, N. W.  
Henderson, Mary A.  
2412 Observatory Place, N. W.  
Hickman, Clara, Principal  
Rose Lees Hardy School  
Foxhall Road & Que St., N. W.  
Hilder, Janie Frost  
3809 Ingomar Street  
Hiscox, Nell F., Administrative Principal,  
George Truesdale School  
1820 Upshur Street, N. E.  
Hodgkins, George W., Teacher  
Curriculum  
1821 Kalorama Road, N. W.  
Hoppe, Arthur A., School of Education,  
George Washington University  
Hughes, Louise R., Principal  
2310 Connecticut Avenue, N. W.  
Jenkins, Ernest S., Assistant Principal  
Randall Junior High School  
First and I Streets, S. W.  
Kyle, May T., Elementary Principal,  
Stanton-Beers Schools  
2129 32nd Street, S. E.  
Lewis, Dorothy M., Administrative  
Principal  
Kimball School  
Minnesota Avenue & Ely Place S. E.  
Lind, Ida Mary, Director, Elementary  
Instruction  
Park View School  
Warder & Newton Streets, N. W.  
Lockwood, Margaret M., Principal  
Horace Mann School  
45th & Neward Streets, N. W.  
Mackintosh, Helen K., Senior Specialist  
in Education  
U. S. Office of Education  
Mallory, Bernice, Federal Agent,  
Home Economics Education  
U. S. Office of Education  
Mattison, Charles W., U. S. Forest  
Service  
Murra, Wilbur F.  
1760 Euclid Street, N. W.  
Noll, Frances F., Elementary School  
Teacher  
3437—14th Street, N. W.  
Northcutt, Shellie T., Director of Jeanes  
Supervision  
726 Jackson Place, N. W.  
Patterson, Don S., Elementary Division,  
U. S. Office of Education  
Peterson, Gladys T., Principal  
Randall Junior High School  
First and I Streets, S. W.  
Pitts, Clara, Administrative Principal  
1705 Kenyon Street, N. E.  
Rohy, Maud F., Teaching Principal,  
Shepherd School  
14th and Kalmia Road N. W.  
Ruediger, Imogene I., Divisional Direc-  
tor D. C. Public Schools  
2836—28th St. N. W.  
Savoy, A. Kiger, Assistant Superin-  
tendent in charge, Elementary  
Schools  
217 T Street N. W.  
Savoy, Ruth Gordon  
1834 Vernon St. N. W.  
Schult, Veryl, Head of Mathematics  
Department  
Wardman Park Hotel  
Scrivener, Katherine, Principal  
Raymond School  
10th and Spring Road, N. W.  
Sister Margaret Marie, Dean of Studies  
Dumbarton College of Holy Cross  
2935 Upton Street N. W.  
Smith, Hugh S., Principal  
Jefferson Junior High School  
8th & H Streets, S. W.  
Smith, Josephine C., Administrative  
Principal  
1948 Second Street, N. W.  
Snyder, Harold E., Director, Commis-  
sion for International Education  
7203 Horwick Road N. W.  
Stimson, William B., Principal  
1816 Twelfth Street N. W.  
Tripp, Dorothy, Principal  
Langdon School  
20th & Franklin Street N. E.  
Van Horn, Rua, Federal Agent, Home  
Economics Education  
U. S. Office of Education  
Wakeman, Mrs. L. J., Principal  
Emory Eckington School  
Lincoln Road & S Street S. E.  
White, Marie, Federal Agent, Home  
Economics Education  
U. S. Office of Education

## FLORIDA

- Arcadia  
Ralls, Ella  
Box 44  
Bartow  
Wingate, Adna, Principal  
Box 815  
Belle Glade  
McCurdy, Charles M., Elementary Prin-  
cipal  
P. O. Box 862  
Sayles, B. G.  
Everglades Vocational Training School  
Blountstown  
Black, Marian W.  
Bradenton  
Daughtrey, Blanch H., Principal  
Ballard Elementary School  
Roerts, Edith L., Supervisor  
Manatee County Schools  
Walker, Mrs. Herman, Principal  
Box 9  
ChIPLEY  
Williams, Colly V., Supervisor of  
Instruction, Washington County  
Department of Public Instruction  
Clearwater  
Morse, C. Marguerite, Board of Public  
Instruction  
Plumb, Kathleen G., Director, Elemen-  
tary Education  
718 Lakeview Street  
Coral Gables  
McCarty, E. E.  
47 Zamora Avenue  
De Funik Springs  
Thompson, Ina S., General Supervisor  
Walton County



- Eustis  
 Calvin, William J., Supervisor  
 Box 293  
 Harris, Reba F.  
 P. O. Box 544  
 Fernandina  
 Vories, Marian  
 119 South Seventh Street  
 Ft. Lauderdale  
 Dichtenmueller, Ruth, Supervisor of  
 Broward College  
 2411 East Las Olas Boulevard  
 Houchard, Frances G., County School  
 Lunch Supervisor  
 1403 S.E. 2nd Street  
 Meade, Buena Lee, General Elementary  
 Supervisor  
 Fort Pierce Elementary School  
 Fort Myers  
 Henderson, E. B., Senior School  
 Gainesville  
 Campbell, James T., Research Associate  
 College of Education, University of  
 Florida  
 Leenhouts, Laura N.  
 University of Florida Curriculum  
 Laboratory  
 Room 312, P. K. Yonge Building  
 Hine, Vynce A., College of Education,  
 University of Florida  
 Leps, Joseph W., University of Florida  
 Lewis, Hal G., Principal  
 P. K. Yonge School  
 Mead, A. R., Director of Research,  
 P. K. Yonge Building  
 University of Florida  
 Nutter, H. H., Director, Curriculum  
 Laboratory  
 317 P. K. Yonge Building  
 University of Florida  
 Green Cove Springs  
 Warren, Elizabeth  
 Box 197  
 Jacksonville  
 Beal, Beulah, Principal, Elementary  
 School  
 1940 Silver Street  
 Brogdon, Nettie E., Supervisor,  
 City Elementary Schools  
 605 Ocean Street  
 Culver, Lola M., Elementary Principal  
 1835 Silver Street  
 Drayer, Erma, Principal  
 Spring Park School No. 72  
 Mount, Onis, Principal  
 School No. 68,  
 113 Copeland Street  
 Owen, Ray A.  
 1153 Miramar Avenue  
 Kissimmee  
 Elkins, Annice Davis, Supervisor,  
 Elementary Education  
 Box 350  
 Lake Butler  
 Geiger, Winnifred R., General County  
 Supervisor  
 Live Oak  
 Lord, Mills M., Jr., Supervisor  
 P. O. Box 57  
 Madison County  
 Bates, Evelyn, Visiting Teacher  
 Board of Education  
 Marianna  
 Stevens, A. J., Jr., General School  
 Supervisor, Board of Public  
 Instruction  
 Mayo  
 Hart, M. Lucile, General Supervisor  
 Box 68  
 Miami  
 Bleier, Theo. J.  
 275 N. W. 2nd St.  
 Butts, Mrs. John L., Supervisor  
 6100 N. W. Second Court  
 MacVicar, Alice M., Miami Public  
 Schools  
 Pearson, L. T., Director of Instruction  
 275 N. W. Second Street  
 Shaffner, Gertrude, Assistant Director  
 of Instruction  
 1636 S. W. 19th Avenue  
 Sister M. Dorothy, O. P., Barry College  
 Snyder, D. R., Supervisor, Health and  
 Physical Education  
 County School Administration Build-  
 ing  
 275 N. W. Second Street  
 Minneola  
 Thurmond, Ruth  
 Box 153  
 Monticello  
 Wells, Ophelia C., General Supervisor  
 825 Waukeenan Street  
 Naples  
 Barnes, Lillian O., General Supervisor  
 Ocala  
 Cameron, Mag Audrey  
 Box 597  
 Orlando  
 Allen, L. Claudia  
 Box 1124  
 Ferguson, Sara, City Supervisor  
 5½ Broadway Court  
 Palmetto  
 Armstrong, Lillian, Principal  
 R. F. D. 1  
 Panama City  
 Bridges, Mattie Lou  
 411 Grove Boulevard  
 Fay, Marjorie, Head of English  
 Department  
 1002 Magnolia Avenue  
 Grant, Arabelle, Supervisor  
 Box 820  
 Holland, Mrs. Frank L., Supervisor  
 Board of Public Instruction  
 P. O. Drawer 820  
 Kelley, J. T.  
 Box 109  
 Moore, Lucille, Elementary Principal  
 Box 251  
 Pensacola  
 Wolverton, Ethel G.  
 c/o Superintendent of Public Instruc-  
 tion  
 County Court House  
 Perry  
 Hart, Alen E., Supervisor  
 Plant City  
 Rudder, Hugh J., Principal  
 R. F. D. 4  
 Port St. Joe  
 Stone, Nobie H., Supervisor  
 Box 245  
 Punta Gorda  
 Horning, Lillian  
 County School Supervisor  
 Quincy  
 Nicholson, Ann C.  
 Box 647  
 St. Petersburg  
 Bainum, Mary I., Supervisor  
 125 24th Avenue South E.  
 Sanford  
 Hand, Ruth, General Supervisor of In-  
 struction  
 1301 Park Avenue

Root, J. Bernard, Counsellor, Dean of Boys  
811 Palmetto Avenue  
Sarasota  
Rainwater, Cleo, Supervisor of Elementary Schools  
Board of Public Instruction  
St. Augustine  
Stimmel, Barbara  
30 Central Avenue  
Davis, Edith M., Supervisor  
2732 Burlington Avenue, North  
Haskell, Carleen Vinal, Principal  
Shorecrest Outdoor School  
Sebring  
Yawn, Maude, County Supervisor  
18 Nasturtium  
Tallahassee  
Culpepper, J. Broward, Florida State College  
Edwards, W. T., Acting Director, Division of Instruction  
State Department of Education  
Frojen, Boetha, State Supervisor of Home Economics Education  
Department of Education  
Goulding, R. L., Professor of Education and Superintendent, Demonstration School  
Florida State College for Women  
Hammond, Sarah Lou, State Department of Education  
Krentzman, Sara Malcolm, Consultant, Libraries  
Department of Education  
Ruediger, Mrs. J. J.  
1009 Gadsden Street  
Skipper, Dora  
Box 1103, Florida State College  
Smith, Louise, Consultant  
Florida School-Community Health Education Project  
Tampa  
Alexander, Martha King  
Director, Elementary Education  
P. O. Box 1424  
Erwin, Edna B., Principal Broward School  
812 South Oregon  
Leto, Ateo P., Principal  
Shore Elementary School  
19th Street and 3rd Avenue  
Mertz, Christine Mills, Director, Hillsborough County Schools for Spastics  
286 North Habana Avenue  
Wauchula  
Cathcart, Jessie N.  
Southernland Ruth V., Elementary Supervisor  
306 East Bay Street  
West Palm Beach  
Brewer, Anne H.  
522-18th Street  
Capron, Clara H., General Supervisor of Instruction  
Box 2469  
Leonard, John I., County Superintendent of Schools  
Westville  
Miller, Mozelle, General Supervisor  
Winter Park  
Eldredge, Ray W.  
550 Osceola Avenue  
Hall, John E., Principal  
Hungerford School  
Hosie, James F.  
1521 Highland Road

## GEORGIA

Albany  
Reese, Hattie M., Jeanes Supervising Teacher  
614 Whitney Avenue  
Shearman, H. S.  
514 Second Avenue  
Americus  
Williams, R. G., Area Supervisor  
State Department of Education  
612 Barlow Street  
Athens  
Burnham, Reba, College of Education, University of Georgia  
Dickerson, James L., Field Staff Member  
Education Panel, Peabody Hall  
Sutton, Rachel S., Professor of Education  
University of Georgia  
649 Oglethorpe Avenue  
Winn, Nell, School of Education  
University of Florida  
Atlanta  
Coleman, M. E., Assistant Superintendent  
10th Floor, City Hall  
Cook, John H., State Department of Education  
229 State Office Building  
Cooper, Mrs. Floyd  
458 North Highland Avenue, N. E.  
Dempsey, Maenelle, Consultant  
Georgia Negro Elementary Schools  
Room 105, 223 Chestnut Street, S. W.  
Donovan, Elizabeth, Instructional Consultant  
State Department of Education  
State Department Office Building  
Hudson, Orlando F.  
P. O. Box 165  
Jackson, M. Caroline  
507 Atlanta Avenue S. E.  
Jones, Lucille D., John B. Gordon School  
205 Metropolitan Avenue, S. E.  
Jones, Sarah, Assistant Director  
Textbook and Library Division  
State Department of Education  
217 State Office Building  
Jordan, Floyd, School Services Consultant  
U. S. Office of Education  
20 Collier Road N. W.  
Lester, L. M., Director  
Teachers Education and Certification  
228 New State Office Building  
Murray, Edith B., Jeanes Supervisor  
556 Mitchell Street S. W.  
Pafford, W. E., Director, State School Supervision  
204 State Office Building  
Slocum, Josie, Supervisor, Grades 4, 5, 6  
165 East 14th Street  
Walker, Knox, Assistant Superintendent  
Fulton County Schools  
521 Court House  
Bainbridge  
Mayes, Elizabeth, Supervising Teacher  
Box 32  
Baxley  
Elder, Mrs. C. G.  
Blackshear  
Hall, Myra L., Instructional Supervisor  
Blue Ridge  
Burgess, Jessie, Supervisor  
Farrin County Schools  
Bowden  
Downs, Mary J., Supervisor  
Carroll County Schools

- Cairo  
   Woodruff, Wilda, Supervisor  
   Grady County  
 Canton  
   Bailey, Elizabeth Moss, Supervisor  
   Department of Education  
 Carrollton  
   Downs, Katie, Director of Teacher  
   Training  
   West Georgia College  
 Cleveland  
   Mix, Pearl, Instructional Supervisor  
 Collegeboro  
   Lyon, Ralph M., Chairman, Division  
   of Education  
   Georgia Teachers College  
 Cornelia  
   Prior, Marian  
   Box 434  
 Dahlonega  
   Jones, Wanda  
 Dallas  
   French, Mary Frances, Supervisor  
   Box 192  
 Dalton  
   King, Bernard, Area Supervisor  
   State Department of Education  
 Decatur  
   Barrett, Willa G., Elementary Principal  
   Ponce De Leon School  
   Sessions, Mrs. P. G.  
   Boys' High School Building  
 Dublin  
   Renfro, Olive, Office County Super-  
   intendent  
 Eastman  
   Harrell, Fannie L., Supervisor  
   Georgia Avenue  
 Ellijay  
   Talley, Mozelle, Instructional Supervisor  
 Emory  
   Dotson, John A., Director, Teacher Edu-  
   cation  
   Emory University  
 Fitzgerald  
   Ducence, Jewel, Instructional Super-  
   visor  
   225 West Pine Street  
 Folkston  
   Smith, William S., Superintendent  
   Charlton County Board of Education  
 Forsyth  
   Searcy, Julia, County Supervisor  
   Monroe County  
 Franklin  
   Gorman, Frances, Supervisor  
   Box 2  
 Gainesville  
   Kent, Vada  
   Box 295  
 Glenville  
   Hughes, Virginia, Supervisor  
   Tattnall County Schools  
 Griffin  
   Divine, Sara, Instructional Supervisor  
   Box 330  
 Guyton  
   Usher, Annabel  
 Hartwell  
   Vandiner, Marie, Instructional Super-  
   visor  
   Hart County Schools  
 Hiawassee  
   Strickland, Jessie, County Supervisor  
 Hoschton  
   Lott, Mrs. Dean, Supervisor  
 Jesup  
   Symmes, Lucille D., County Supervisor  
   Board of Education  
 LaFayette  
   Walraven, Annie Mae  
 Lawrenceville  
   Carver, Mrs. W. D., Supervisor  
   Gwinnett County Board of Education  
 Macon  
   Goodman, Mrs. Fielder B., Primary  
   Supervisor  
   2-D Massee Apartments  
   Smith, Emma O., Principal, Fort  
   Hawkins  
   280 College Street  
   Swann, A. J., Principal  
   Lanier High School for Boys  
 Madison  
   Thompson, Grace Lipscomb, Supervisor  
   Box 413  
 Monroe  
   Teasley, Julia, County Supervisor  
 Milledgeville  
   McKnight, Cecilia Bason, Associate  
   Professor of Education  
   Box 474  
 Moultrie  
   Cox, Mrs. L. G., Supervising Elemen-  
   tary Principal, Public Schools  
   Parrish, Ethel  
   P. O. Box 425  
 Pearson  
   Watson, Martha, Supervisor, County  
   Schools  
   P. O. Box 71  
 Rome  
   Dawson, Freda T., Jeanes Supervising  
   Teacher  
   928 East 1st Street  
   Jimmerfield, Verda  
   Box 865  
   Wimberly, Kathleen, Supervisor  
   Floyd County Schools  
 Savannah  
   Burrroughs, Cecil B., Principal  
   Pennsylvania Avenue School  
   Folger, Ruth M., Principal  
   Orkethorpe Avenue School  
   Heard, Virginia Lord, Assistant Super-  
   intendent  
   208 Bull Street  
   Jackson, Rosemary C.  
   809 West 39th Street  
   McCune, W. W., Assistant Superin-  
   tendent of Schools  
   Board of Education  
   Bull and Hull  
   Norvell, Mrs. Crane, Principal  
   Pape School  
   906 Drayton Street  
   Nuschaum, Lillian B., Principal  
   Moore Avenue School  
   511 Forsyth Apartments  
   Parker, Laura M.  
   211 East Gwinnett Street  
   Scawright, Margie, Supervisor of Ele-  
   mentary Schools  
   603 East 55th Street  
 Statesboro  
   Joiner, Oscar, Area Supervisor  
   State Department of Education  
   Box 173  
   Snipes, Sue, Supervisor  
   Bulloch County Schools  
   Department of Education  
 Summer  
   McDonald, M. S., Principal  
   P. O. Box 77  
 Summerville  
   Pool, Jewel, Elementary School Super-  
   visor

Sylvester  
Deariso, Elizabeth J.  
Supervisor, Worth County Schools  
Box 98  
Thomaston  
Owings, Ralph S., Superintendent of  
Schools  
Thomasville  
Davis, Gladys C., Supervisor  
P. O. Box 729  
Gemmage, Ruby O.  
c/o County School Superintendent  
Tifton  
Benson, Frances, Instructional Super-  
visor  
Tift County Public Schools  
Mitchell, Pendleton  
Box 64  
Quattlebaum, Virginia, Visiting Teacher  
Box 345  
Toccoa  
Lumsden, Isabel, County Supervisor  
Box 346  
Uvalda  
Heule, Alberta M., Supervisor  
Box 34  
Young Harris  
Lowe, Cornelia, Educational Assistant  
Box 137  
Wadley  
Perkins, Mary Ellen, Supervisor  
Jefferson County

## IDAHO

Boise  
Bays, Bess  
915 Hays Street  
Cole, O. D., High School Supervisor  
1944 North 17th Street  
Burley  
Bjorkman, S. R., Superintendent of  
Schools  
Independent School District, Class A.  
No. 1  
Cassin and Twin Falls Counties  
Lewiston  
Carlson, L. L., Superintendent of  
Schools  
Lewiston Public Schools  
Click, Leo E.  
916—11th Avenue  
Daniels, Andrea, Supervisor  
Northern Idaho College of Education  
Pocatello  
Harris, Wesley Milligan, Residence Hall  
Idaho State College  
Hendricks, Lorene, Director of Practice  
Teaching  
Southern Branch, University of  
Idaho

## ILLINOIS

Alton  
Leyson, Elta, Administrative Assistant  
Board of Education  
Arlington Heights  
Clabaugh, Ralph E.  
410 North State Road  
Aurora  
Driscoll, Mary C., Reading Consultant  
436 Iowa Avenue  
Kent, Orla G.  
618 Spring Street  
Barrington  
Plimpton, Blair, Countryside School  
Thomas, F. C., Superintendent  
310 South Hough Street

Belleville  
Blair, Clarence D., Superintendent  
Office County Superintendent of  
Schools  
Berwyn  
McIntire, Alta, Director of Primary  
Education and Curriculum  
7125 Stanley Avenue  
Bloomington  
Ahlenius, Ruth, Supervising Principal  
Irving School  
701 West Mill Street  
Blue Island  
Richards, Mrs. H. L., Superintendent,  
Community High School  
12915 South Maple Avenue  
Carbondale  
Entsminger, Mary, Elementary Super-  
visor  
302 North Springer  
Champaign  
Drom, Beulah  
511 West Washington Street  
Charleston  
Irwin, Mary Margaret, Reading Con-  
sultant  
1029—10th Street  
Reid, Florence E., Assistant Professor  
of Elementary Education  
Eastern Illinois State Teachers  
College  
Reinhardt, Emma, Head, Department of  
Education  
859 Eleventh Street  
Saunders, Nannilee, Assistant Professor  
900 Seventh Street  
Chicago  
Batchelder, Mildred, American Library  
Association  
Chief, School and Children's Library  
50 East Huron  
Bay, J. Christian, John Crerar Library  
86 E. Randolph Street  
Brewington, Ann, Associate Professor,  
Business Education  
University of Chicago School of  
Business  
Burr, Elbert W., Box 152, Graduate  
Education Building  
University of Chicago  
Cooper, Dan H., Department of Education  
University of Chicago  
Corey, Stephen M., Department of  
Education  
University of Chicago  
Crawford, Bernice M., Director of Stu-  
dent Teaching  
Pestalozzi-Froebel Teachers College  
410 S. Michigan Boulevard  
Cuddy, Marie C.  
c/o Lyons & Carnahan  
2500 Prairie Avenue  
Gray, William S., Department of  
Education  
University of Chicago  
Edwards, Muriel J.  
525 North Austin Boulevard  
Graff, Ethel J.  
1815 Prairie Avenue  
Hatfield, W. Wilbur, Secretary  
National Council of English Teachers  
211 W. 68th Street  
Hein, Fred V., American Medical  
Association  
535 N. Dearborn Street  
Hohl, George W., Department of  
Education  
University of Chicago  
5835 Kimbark Avenue



- Horwick, Frances R., Roosevelt College  
231 South Wells Street
- Howard, Alex H., Department of Education  
University of Chicago
- Johnston, A. Montgomery, Graduate Assistant  
Box 194, Department of Education  
University of Chicago
- Kaar, Galea M., Elementary Principal  
2143 Hudson Avenue
- Keith, Linton J., Editor  
Follett Publishing Company  
1257 South Wabash Avenue
- Koos, L. V., College of Education  
University of Chicago
- Lau, John, Representative  
Scott, Foresman & Company  
623 South Wabash Avenue
- Lingerfelder, Louise M.  
5835 Kimbark Avenue
- Mackay, G. Gordon  
c/o Laidlaw Brothers  
328 South Jefferson Street
- Malo, Albert H.  
3416 North Overhill
- Sister Eileen Marie  
3000 North Mango
- Mason, Frances  
c/o D. C. Heath & Company  
1815 Prairie Avenue
- Mendenhall, James E.  
c/o Compton's Pictured Encyclopedia  
1000 North Dearborn Street
- Oftedal, Laura, Teacher, Laboratory Schools  
University of Chicago  
5616 Blackstone Avenue
- Ott, Hazel H., Curriculum Research Department  
F. E. Compton & Company
- Paulsrud, Alice B.  
1205 Sherwin Avenue
- Perkins, E. L., Vicepresident  
A. J. Nystrom & Company  
3333 Ellston Avenue
- Pierce, Paul R., Principal  
Wells High School  
936 North Ashland Avenue
- Sand, Ole, International House  
University of Chicago
- Sanders, Agnes L., Elementary Supervisor  
Dist. 76  
2428 Greenleaf
- Sanz, Anna D.  
4840 Washington Boulevard
- Seyfert, Warren C., Laboratory School  
1362 East 59th Street
- Sister M. Santoslaus, Supervisor  
3800 Peterson Avenue
- Skinner, Kate E., Ginn & Company  
2301 Prairie Avenue
- Smith, Isabel  
7859 South Shore Drive
- Smith, Ruthann  
c/o The Macmillan Company
- Stateler, C. B., Sales Manager  
A. J. Nystrom & Company  
Publishers Journal of Geography  
3333 Ellston Avenue
- Troyer, Raymond E.  
6053 Woodlawn Avenue
- Wharton, Mildred M., Extension Specialist  
National Congress of Parents & Teachers  
Room 1301—600 South Michigan Boulevard
- Williams, Dorothy F., Supervisor of Physical Education  
228 North La Salle Street
- Williams, Wayman J.  
328 South Jefferson Street
- Willy, Dorothy E., Instructor and Supervisor  
10750 South Seeley Avenue
- Crete  
Crackel, Verne E., Superintendent of Schools  
65 East Cass Street
- Crystal Lake  
McCleery, Wayne E., Principal  
Community High School
- Decatur  
Grant, Lester J., Assistant Superintendent  
Public School Office  
Meyer, Charlotte, Elementary Supervisor  
Decatur Public Schools
- Muffley, E. J.  
701 West Grand Avenue
- DeKalb  
Bellis, Bertha, Training Teacher  
Northern Illinois State Teachers College
- Blair, Witt, Director of Student Teachers  
State Teachers College
- Bloomster, A. Maurine  
414 West Locust
- Des Plaines  
Hedberg, L. C., Principal  
1509 Center Street
- Downers Grove  
Hanna, Grace, Avery Coonley School
- East St. Louis  
Castello, Mary, Supervisor  
709-A 24th Street
- Coombs, Cecile C.  
545 Washington Place
- Trimmer, Carmen A., Supervisor of Art  
555 North 14th Street
- Elgin  
Berge, Marvin L.  
Edgerton, Ronald B.  
322 Kimball Street
- Thompson, Orrin G.  
Elgin Public Schools
- Evanston  
Adams, Agnes L., National College of Education
- Brouillette, Jeanne S., Curriculum Coordinator  
1323 Hinman Avenue
- Brubaker, Miriam H.  
2811 Elgin Road
- Campbell, Minnie, National College of Education
- Dasher, Ruth E.  
1566 Oak Avenue
- Dawes, Florence E., Teacher  
2219 Maple Avenue
- Durgin, Laura W.  
824 Mulford Street
- Ellsworth, Ruth E., School of Education  
Northwestern University
- Frey, Grace Hurst  
738 Hinman Avenue
- Hesselbaum, Caroline E., Principal  
1637 Orrington Avenue
- Howard, Harriet, Director, Supervision Department  
National College of Education
- Jackson, Elizabeth  
508 Keeney Street
- Kisch, Gertrude A.  
2519 Ridge Avenue

- McSwain, E. T., Professor of Education  
 Northwestern University School of  
 Education  
 Richardson, Grace H.  
 1119 Maple Avenue  
 Sanford, Helen, Principal, Haven School  
 1940 Sherman Avenue  
 Shaw, Mary Dwyer, Elementary School  
 Principal  
 638 Elmwood Avenue  
 Sheldon, Vera G., Supervisor  
 901 Maple Avenue  
 Shoemaker, Bertha  
 717 University  
 Theman, Viola, School of Education  
 Northwestern University  
 Witty, Paul A., Professor of Educa-  
 tional Psychology  
 Northwestern University  
 Tuttle, Edward M., Row Peterson &  
 Company  
 Wood, William R., Chairman, English  
 Department  
 Evanston Township High School  
 1600 Dodge Avenue  
 Evergreen Park  
 Ricketts, Robert E.  
 95th & Sawyer Avenue  
 Forest Park  
 Craney, Wayne A., Supervising Principal  
 Forest Park Schools  
 Dimmitt, Welborn S., Superintendent  
 Galesburg  
 Lindsey, Richard V., Superintendent of  
 Schools  
 Swanson, Nellie, Elementary Supervisor  
 Board of Education  
 Glencoe  
 Misner, Paul J., Superintendent of  
 Schools  
 Greenville  
 Pinkstaff, H. E., City Superintendent  
 of Schools  
 Glen Ellyn  
 Banson, Hilda J., Principal  
 Grade Building  
 430 Park Boulevard  
 Hartsburg  
 Ryan, Weldon E.  
 Highland Park  
 Ball, Lester B., Superintendent  
 District #108, Lincoln School  
 Beam, Darrell R.  
 815 South Ridge Road  
 Dable, C. O., Superintendent of Schools,  
 District No. 107  
 Walton, Clara Kuester, Board of Edu-  
 cation, District 108  
 Hinsdale  
 Durman, Clifford F.  
 3 North Vine  
 McNamara, Loretta M., Elementary  
 Supervisor and Principal  
 15 West First Street  
 Jacksonville  
 Fitch, Grace  
 513 West State Street  
 Joliet  
 Leatherman, Gladys, Supervisor  
 16 Ivy Street  
 Sister M. Agathene, Instructor in  
 Education  
 College of St. Francis  
 Kankakee  
 Menard, Mildred M., Assistant County  
 Superintendent of Schools  
 La Grange  
 Blanchard, Marjorie I., Curriculum  
 Coordinator  
 30 South 6th Avenue  
 Macomb  
 Dixon, Dorothy I.  
 319 West Wheeler Street  
 Pence, Helen M., Training Teacher  
 827 West Adams Street  
 Ray, Ethel, Western Illinois State  
 Teachers College  
 Turner, C. Adam, Supervisor, Rural  
 Education  
 433 North Johnson  
 Marseilles  
 Hawley, Ray C.  
 Maywood  
 Pygman, C. H., Superintendent  
 Washington School  
 Normal  
 Alexander, Frances M., Instructor,  
 Social Studies  
 Illinois State Normal University  
 Arnold, Mary S., Supervisor of 3rd  
 Grade and Assistant Professor  
 Illinois State Normal University  
 Carrington, J. W., Illinois State Normal  
 University  
 Clemens, Heberts, Illinois State Nor-  
 mal University  
 Cooper, Margaret, Director of Elemen-  
 tary Education  
 Illinois State Normal University  
 Grime, Elsie, Illinois State Normal  
 University  
 Hayden, Wezette A., Illinois State  
 Normal University  
 Tipton, Gladys, Associate Professor of  
 Music  
 Illinois State Normal University  
 Northbrook  
 Watson, N. E., Superintendent of  
 Schools  
 Northfield  
 Presler, Frances  
 Oak Park  
 Belsly, Josephine  
 612 South Cuyler  
 Johnson, Esta D.  
 315 Jackson Boulevard  
 Keener, E. E., Principal  
 250 Forest Avenue  
 Menzemer, Viola  
 122 Forest Avenue  
 Price, Devona M., Administration  
 Building  
 122 Forest Avenue  
 Reed, L. L., Principal  
 William Beye School  
 230 Ontario Street  
 Savage, Russell H., Elementary Principal  
 1135 S. Wenonah Avenue  
 Smith, Bertrand L.  
 522 South Kenilworth Avenue  
 Zwikstra, Mary  
 177 North Linden Avenue  
 Palos Park  
 De Boer, John J.  
 125th Street & 81st Avenue  
 Park Ridge  
 Sweat, C. H., Assistant Superintendent  
 Abraham Lincoln High School  
 Peoria  
 Barnes, Fred  
 4402 Knoxville Avenue  
 C. M. R. 93  
 Breed, Blanche, Elementary Supervisor  
 117 Thrush, Apt. #4  
 Davis, Melvin G., Superintendent of  
 Schools  
 300 North Monroe Street  
 Quincy  
 Norwood, Marquis, Principal  
 1403 Hampshire Street

- Quigley, Blanche, Director of Curriculum  
1635½ Broadway  
River Forest
- Anderson, Robert H., Principal  
Roosevelt School  
7560 Oak Street
- Burt, C. Vinton, Office of Supervisor,  
Board of Education
- Schilling, Roy O., Principal  
7970 Washington Boulevard
- Sugden, W. E., Curriculum Department,  
Board of Education
- Riverside
- Hauser, L. J., Superintendent of Schools,  
Board of Education  
District No. 96
- Hunt, Lucille H.  
8001 Edgewater Road
- Holt, Pauline, Primary Supervisor  
43 Forest Avenue
- Rockford
- Armour, Charles R.  
517 6th Street
- Chapman, Blanche L.  
611 North Court Street
- Fosse, Frances  
1721 North Church Street
- Hunt, Susan, Guidance Director  
509 Calvin Park Boulevard
- Johnson, Maude E., Supervisor of Instruction  
c/o Board of Education
- Larson, Irene  
719 Buckbee Street
- Lofdahl, Leslie C., Principal  
Jackson School  
Summit and Crosby Streets
- Lundgren, Emma Charlotte  
2703 Jackson Street
- Mandeville, Dorothy, Supervising Principal, R. K. Welch School
- Shufelt, Edith E., Director of Preschool  
534 Fisher Avenue
- Wise, John R.  
3507 Oakley Street
- Rock Island
- Trankenschuh, Amelia, Director of Curriculum and Instruction  
Office of the Superintendent of Schools
- Springfield
- Zimmerman, R. B., Board of Education  
206 East Adams Street
- St. Louis
- Kern, Ursula  
7529 Leedale Drive
- Sycamore
- McCullah, Marguerite J., Courthouse
- University
- Stein, Ethel, Illinois State Normal
- Urbana
- Allen, Charles M., University High School
- Bellack, Arno A., College of Education  
University of Illinois
- Dolch, E. W., Associate Professor of Education  
University of Illinois
- Hand, Harold, University of Illinois
- Hastings, Thomas  
307 Administration Building E  
University of Illinois
- Monroe, Walter S., Professor of Education  
300 Gregory Hall  
University of Illinois
- Muntyan, Milosh  
301 Gregory Hall  
University of Illinois
- Shores, J. H., Associate Professor of Education  
College of Education
- Smith, B. Othanel, Associate Professor of Education  
College of Education  
University of Illinois
- Van Til, William, Professor of Education  
College of Education  
University of Illinois
- Waukegan
- Curtis, Ina L., Principal, Glen Flora School  
1110 Chestnut Street
- Wheaton
- Fadenrecht, John H.  
407 East Liberty
- Morgan, Lewis L., County Superintendent  
County Building
- Wilmette
- Norberg, Kenneth D., Encyclopaedia Britannica  
1150 Wilmette Avenue
- Oldendorf, Dorothy  
900 Central Avenue
- Weedon, Vivian, Curriculum Consultant  
204 Fifth Street
- Williams, O. S.  
1035 Greenwood Avenue
- Winnetka
- Beman, Lynn W., Parent Teacher Association  
559 Arbor Vitae Road
- Carpenter, Robert H., Teacher, English New Trier High School
- Gaffney, Matthew P., Superintendent, New Trier Township High School
- Shane, Harold G., Superintendent  
Winnetka Public Schools
- Woodstock
- Dierzen, Verda  
636 North Madison Street
- Endres, Mary P., Superintendent  
Box 183
- Worden
- Hatfill, Harlie A., Superintendent  
Worden Public School
- INDIANA
- Anderson
- Drumm, Enoch S., Senior High School Building  
Klein, Grace A.  
307 Bonser Apts.
- Bloomington
- Andrews, L. O., Director, Supervised Teaching  
Indiana University
- Binford, H. E., Superintendent, Public Schools
- Bookwalter, Karl W., Assistant Professor, Indiana University  
527 S. Highland
- Dunfee, Maxine, Indiana University
- Richey, Robert W., Assistant Professor of Education  
Indiana University
- Simon, Donald L., Bloomington High School
- Strickland, Ruth, Assistant Professor of Education  
School of Education, Indiana University
- Chesterton
- Breed, F. S., Professor  
Dune Acres

- Clayton  
Lyon, Willis W.  
Box 92
- Columbus  
Smith, L. Frances, Director of Elementary Education  
734—7th Street
- Connersville  
Curtis, E. Louise, Primary and Intermediate Supervisor  
P. O. Box 104
- Crown Point  
Spangler, Mamie, County Supervisor Kindergarten and Primary  
Box 290, 307 North Court Street
- Elkhart  
McAllister, Anne, Helping Teacher  
Lincoln School
- Evansville  
Wey, Harry R., Jr., Supervisor of Secondary Physical Education  
Department of Health, Physical Education and Special Education
- Fort Wayne  
Broderick, Catherine M., Director of Social Studies and Visual Education  
Fort Wayne Public Schools  
Dodge, Agnes Claudine  
2251 South Wayne Avenue  
Holland, Mabel K., Director, Elementary Education  
Public School Offices  
Wear, Olive G.  
3121 Hoagland
- Franklin  
Hunt, Margaret, Supervising Principal  
11 Martin Place  
Matthews, Margaret D., Reading Consultant  
64 S. Forsythe Street
- Gary  
Engels, Bernice, Board of Education  
524 Garfield Street  
Myers, S. W., Board of Education  
524 Garfield Street
- Goshen  
Witmer, Mildred  
1608 South 8th Street
- Hammond  
Coleman, C. T., Hammond High School  
Gray, Merle, Elementary Supervisor of City Schools  
Board of Education Office
- Hobart  
Tabbert, Mildred E., Supervising Principal  
813 Georgiana Street
- Holland  
Bartelt, Irene D., Teacher  
Holland Public Schools  
Box 56
- Holy Cross  
Sister M. Agnes Cecile, Instructor in Educational Department  
St. Mary's College  
Notre Dame
- Huntington  
Johnson, Eldon D.  
218 East Taylor Street  
Miller, Inez G., Elementary Supervisor  
1312 North Jefferson Street
- Indianapolis  
Ambroz, Margaret, Principal  
20 N. California  
Bell, Eva H., Assistant Principal  
856 Woodrow  
Burrin, Esther V., Director  
State Department of Public Instruction
- Gorman, Frank H., Director  
Department of Elementary Education  
Butler University
- Granger, Grace A., Director of Instruction, Teacher Education  
2222 East Kessler Boulevard
- Herbst, Frieda, Elementary Principal  
966 North Bellevue Place
- Holmes, Doris F., Director,  
Instruction and Curriculum Studies  
150 North Meridian Street
- Kimber, Grace W., Principal  
School No. 47  
1240 West Ray Street
- Marley, Margaret, Primary Teacher  
21 North State Avenue
- Patterson, Ruth, Associate Professor,  
Kindergarten Education  
Butler University  
717 North Alabama Street
- Robinson, M. Edith, Handwriting Consultant  
7034 Park Avenue
- Russell, Jessie C., Principal  
111 East 16th Street, Apartment 614
- Trefz, Lettie P., Assistant Supervisor  
of Handwriting  
953 North Audubon Road
- Jeffersonville  
Loftus, Grayce, Lincoln Heights
- Kokomo  
Baldwin, Susan M., Elementary Supervisor  
1534 South Armstrong
- Lafayette  
Dodds, B. L., Division of Education  
Purdue University
- Simpson, Dorothy, Elementary Supervisor  
744 S. 26th Street  
Sister Leontine, Supervisor  
St. Francis High School
- LaFontaine  
Kessler, Agnes C., Primary Supervisor  
R. F. D. 1
- La Porte  
Ahlswede, Ben F., Director, La Porte County Schools  
420 East Lincoln Way
- Armstrong, Leila, Director, Elementary Education  
1210½ Maple Avenue
- Boston, Paul F., Superintendent  
La Porte Public Schools
- Lebanon  
Christian, Thomas L., Superintendent of Lebanon City Schools
- Logansport  
Craig, M. Dorothy, Director of Elementary Education  
Roosevelt Building  
7th & Broadway
- Michigan City  
Coffin, Florence  
1005½ Manhattan Street
- Knapp, M. L., Superintendent  
Isaac C. Elston Jr. High School Building
- O'Connor, Eleanor, Supervisor of Elementary Education  
Sheridan Beach Hotel
- Mishawaka  
Lindahl, Hannah, Supervisor of Elementary Education  
Mishawaka Public Schools
- Meier, Pauline, Supervisor  
Kenneth School  
R. F. D. 2



- Muncie**  
 Carmichael, A. Max, Associate Professor of Education  
 Ball State Teachers College  
 Howe, Kenneth E., Ball State Teachers College  
 Lykins, Charles E.  
 R. F. D. 6  
 Morrison, Nellie C., Supervisor of Elementary Education  
 148 Central High School Building  
 Toops, Myrtle D., Instructor  
 224 N. Tolley Avenue  
**New Castle**  
 Castor, E. S., Principal  
 Senior High School  
 Dunn, Pearl, Grade School Supervisor  
 New Castle City Schools  
**North Manchester**  
 Drescher, Edith, Supervisor  
 906 North Wayne Street  
**Oaklandon**  
 Hamilton, Otto T., Assistant Professor of Education  
**Richmond**  
 Jones, Daisy Marvel, Director of Elementary Education  
 127 North 10th Street  
**South Bend**  
 Dernbach, Helen, School Administration Building  
 228 South St. Joseph Street  
 Kirby, Bryon C., Director of Elementary Curriculum  
 920 Sherman Ave.  
**Terre Haute**  
 Foltz, Elsie, Elementary School Principal  
 2427 Garfield Avenue  
 Fuqua, Blanche E., Director of Instruction  
 667 Walnut Street  
 Lamb, Herbert, Assistant Superintendent  
 639 Chestnut Street  
 Lindsey, Margaret, Indiana State Teachers College  
 Redman, Ruth N., State Manager, Encyclopaedia-Britannica  
 1672 North Seventh  
 Reed, Mary D., Assistant Director, Division of Training  
 Indiana State Teachers College  
 Smith, Lloyd, Department of Education  
 Indiana State Teachers College  
 Westfall, Byron L., Director  
 Division of Teacher Training  
 Indiana State Teachers College  
**Vincennes**  
 Staninger, Ruth E., Elementary Supervisor  
 607 Upper 11th Street  
**West Lafayette**  
 O'Reilly, Justine B., Assistant Professor  
 Education Building, Purdue University  
**Zionsville**  
 Cook, Helen Ruth  
 290 Cedar Street
- IOWA**  
**Agency**  
 Gay, M. Alice  
**Ames**  
 Fallgatter, Florence, Head, Home Economics Education  
 Iowa State College  
 Pattison, Mattie, Associate Professor  
 Home Economics Hall
- Cedar Falls**  
 Brown, A. E., Professor of Education  
 Iowa State Teachers College  
 Helff, Bernice, Campus School, Iowa State Teachers College  
 2304 Olive Street  
 Koehring, Dorothy, Kindergarten Supervisor  
 Iowa State Teachers College  
 Wagner, Guy  
 Iowa State Teachers College  
**Cedar Rapids**  
 Reid, Hale C., Director  
 Curriculum & Instruction, Administration Building  
 346 Second Avenue S. W.  
**Clinton**  
 Grau, R. T., Director  
 1510 Pershing Boulevard  
**Council Bluffs**  
 Steinbaugh, John K., Principal  
 Abraham Lincoln High School  
**Davenport**  
 Cosner, Etta L., Elementary Supervisor  
 1001 Harrison Street  
 McPhail, H. R., Director  
 Elementary Education, Administration Building  
 1001 Harrison Street  
**Decorah**  
 Frank, Emily, Director of Student Teaching  
 College Hill  
**Des Moines**  
 Cooke, Tolosa, Elementary Teacher  
 237 Franklin  
 Hamm, Bess  
 1077 - 27th Street  
 Harrington, Nora, Casady School  
 Hasch, Marie  
 4014 Kingman  
 Howland, Adeline E., Assistant Director of Elementary Education  
 629 Third Street  
 Hoyt, Genevieve Anderson  
 6030 North Waterbury Road  
 Hoyt, C. O.  
 6030 North Waterbury Road  
 Macomber, F. G., Dean  
 College of Education, Drake University  
 Morgan, Doris M., Elementary Principal  
 2404 Forest Drive  
 Thorne, N. Ferne, Elementary Principal  
 South Union and Hartford, Washington School  
 Trott, Walter  
 629 Third Street  
**Forest City**  
 Peirce, Lottie Mildred  
 Box 168  
**Fort Dodge**  
 Alexander, Mildred, Elementary Adviser  
 526 North 10th Street  
**Iowa City**  
 Horn, Ernest, Professor of Education and Director, University Elementary School  
 W107 East Hall  
 Snedaker, Mabel, University Elementary School  
 State University of Iowa  
 Van Dyke, L. A., Associate Professor of Education and Director, University High School  
 State University of Iowa

- Keokuk  
 Brown, Florence E., Elementary Supervisor  
 Keokuk Public Elementary Schools  
 Washington Building  
 Sawyer, Barbara Lee  
 418 North 4th Street  
 Stone, Franklin D., Assistant Principal  
 Senior High School  
 Knoxville  
 Davis, Floyd, Superintendent  
 Knoxville Public Schools  
 Plotts, Sylvia F., County Superintendent  
 Marion County Schools  
 Leon  
 Petty, Walter T., Graduate Student  
 Box 365  
 Mason City  
 Chappel, Hazel V., Thomas County Superintendent  
 Courthouse  
 Prendergraft, Henry C., Elementary Supervisor  
 120 East State Street  
 Mount Vernon  
 Dalton, Mary Beatrice, Assistant Professor, Elementary Education  
 Cornell College  
 Flynn, Helen M., Assistant Professor of Education  
 Cornell College  
 Newton  
 Hartnett, Ellen, Field Representative  
 Iowa State Education Association  
 Hotel Maytag  
 Ottumwa  
 Van Antwerp, J. F., Principal  
 Ottumwa High School  
 Perry  
 Vanderlinden, J. S., Superintendent of Schools  
 Sigourney  
 Hoffman, Rufus H., Principal  
 502 West Pleasant Valley Street  
 Sioux City  
 Knipfer, G. G., Director of Curriculum  
 2900 Isabella  
 Petersen, Inez  
 1221 Pierce Street  
 Spencer  
 Johnson, W. F., Superintendent  
 Box 647  
 Waterloo  
 Lester, Miriam L., Assistant Director, Elementary Education  
 East High School Building  
 Logan, Jack, Superintendent of Schools  
 Peterson, Evelyn, Director of Elementary Education  
 East High School Building  
 Webster City  
 Hall, Mary E.  
 1600 Wilson Avenue  
 McBurney, J. H., Superintendent  
 Public Schools  
 KANSAS  
 Arkansas City  
 Leasure, Ernestine, General Supervisor,  
 City Schools  
 215 North A Street  
 Coffeyville  
 McPherson, Dorothy, Elementary School Supervisor  
 Board of Education Office  
 Dodge City  
 Mootz, Gussie, Principal  
 808 Trail  
 Olson, Raymond A., Junior College  
 Emporia  
 Day, Jessie May  
 1326 Highland  
 Evans, Mildred L., Elementary Supervisor  
 Board of Education  
 Franz, Ida M., Supervising Teacher  
 1510 Highland Place  
 Goebel, Anne M., State Teachers College  
 Harrison, George R.  
 1110 Market  
 Zeller, Dale, Professor of Education  
 Kansas State Teachers College  
 Garden City  
 Matthews, Georgia R.  
 Box 870  
 Harper  
 Briner, F. W.  
 Hays  
 Davis, Gainelle, Director, Elementary Education  
 Fort Hays, Kansas State College  
 Hesston  
 Lind, I. R., Hesston College  
 Hutchinson  
 Woodard, R. C., Elementary Supervisor,  
 Junior College  
 Kansas City  
 Collins, Joseph H., Principal  
 Northeast Jr. High School  
 Fourth & Troup Avenue  
 Kier, Hazel, Supervisor, Intermediate Grades  
 Library Building  
 Streeter, Helen, Kindergarten-Primary Supervisor  
 Board of Education  
 Thompson, S. H., Jr.  
 1520 North Tenth Street  
 Lawrence  
 Hobson, Cloy S., Fraser Hall, University of Kansas  
 Kelley, W. Keith, Principal  
 Haskell Institute  
 Leavenworth  
 McPherson, Hilda, Director of Elementary Education  
 100 1/2 Fifth Avenue  
 Lindsborg  
 Soderstrom, Lavern W., Superintendent of Schools  
 Manhattan  
 Bergman, F. V., Superintendent of Schools  
 Public Schools  
 Parsons  
 Guthridge, Wallace H., Superintendent of Schools  
 Parsons City Schools  
 Box 526  
 Pittsburg  
 Carroll, Jane M., Professor of Elementary Education  
 Kansas State Teachers College  
 Hughes, Perva, Supervisor  
 Kansas State Teachers College  
 Peck, Ethel Moore, Supervisor  
 Kansas State Teachers College  
 Salina  
 Stewart, Grace E., Director of Elementary Education  
 P. O. Box 808, City Hall  
 Tonganoxie  
 Thorpe, B. R., Superintendent of Schools  
 Topeka  
 Delav, Glenn A., Director of Curriculum  
 State Department of Education  
 Engstrand, Agnes, State Department Education

Graves, Perdue B., Director of Adult  
Education  
2822 Huntoon  
Weaver, E. B.  
337 Woodlawn  
Wichita  
Gammon, Delore, Elementary Supervisor  
428 S. Broadway  
Harnly, Paul W., Director, Secondary  
Education  
428 South Broadway  
Haws, Nina  
315 North Lorraine Street  
Moore, S. F., Principal, High School  
3641 Leahy Court  
Vance, Inez  
623 South Grove Street

## KENTUCKY

Albany  
Maupin, Audrey, Supervisor, Clinton  
County  
Ashland  
Northcutt, Ruby Castle, Elementary  
Supervisor  
3001 Carter Avenue  
Bardstown  
Hart, Charles, Superintendent, Nelson  
County Schools  
Marshall, Mary S., Elementary School  
Principal  
Bardwell  
Rowland, Joe Anna, Grade Supervisor,  
Carlisle County Schools  
Berea  
Ambrose, Luther M., Professor  
514 College Station  
Chidester, Albert J., Head, Education  
Department  
Berea College, Box 433  
Graham, Charles C., Coordinator  
54 Estill  
Bloomfield  
Buckles, W. T., Elementary Principal,  
Chaplin School  
Bowling Green  
Cole, Mary I., Associate Professor of  
Education  
Box 236 College Heights  
Western Kentucky Teachers College  
Hume, Sue T.  
625 - 12th Street  
Sleamaker, R. L., Jr.  
Box 235, College Heights  
Smith, Bert L., Western Kentucky State  
Teachers College  
Box 187  
Burkesville  
Keen, Mary Ann, Helping Teacher  
Cadiz  
Tubbs, Loris  
Campton  
Walker, W. B., Elementary Supervisor  
Wolfe County  
Clinton  
Magruder, Mai  
Cloverport  
Wesley, H. M., Superintendent  
Box 125  
Covington  
Rives, Sara, Supervisor, Intermediate  
Grades  
25 East 7th Street  
Young, Arline, Primary Supervisor  
25 East 7th Street  
Danville  
Swain, Mary, Scott-Forsman  
230 North Third Street  
Donansburg  
Mays, Roxye  
Drakesboro  
Lindsey, Evelyn, Elementary Principal  
Drakesboro Consolidated School  
Earlington  
Graham, Rozelle  
P. O. Box 35  
Edmonton  
Barton, Eva, Elementary Supervisor  
Erlanger  
Griggs, Rozellen, Teacher  
201 Erlanger Road  
Evarts  
Middleton, Fannie, Elementary Principal  
Ft. Thomas  
Bridges, Russell E., Superintendent,  
City Schools  
Frankfort  
Burriss, Nona, Assistant Director,  
Textbooks  
State Department of Education  
Combs, Louise, Assistant Director,  
Certification  
State Department of Education  
Taylor, Sam, State Department of  
Education  
Wilhoit, Naomi, Supervisor  
New Capitol Building  
Franklin  
Travelstead, Mary Lee, Assistant Prin-  
cipal  
312 West Cedar Street  
Greensburg  
Gumm, Mrs. W. R., Principal,  
Summersville School  
Greenup  
Virgin, Vera, Elementary Supervisor  
Greenup County Box 58  
Greenville  
Taylor, Grace E., Elementary Supervisor  
Muhlenburg County  
Walker, J. M., Elementary Principal  
120 Brank Street  
Harlan  
Huff, Talmage, Director, Elementary  
Supervision  
Harlan County Schools  
Norsworthy, E. M., Assistant Superin-  
tendent  
Harlan County Schools  
Walden, Gladys M., Helping Teacher  
311 Duffield Street  
Hazard  
Ritchie, Jean, Elementary Supervisor,  
Perry County  
Hindman  
Singleton, L. R.  
Hogue  
Jasper, Susan E.  
Hyden  
Estridge, P. P., Helping Teacher  
Box 164  
Independence  
Taylor, C. A., Elementary Supervisor  
Kenton County  
Jackson  
Sutton, Elizabeth W., Breathitt County  
Schools  
Turner, Marie R., Superintendent  
Langley  
Turner, Virgil O., Principal, High  
School  
Lawrenceburg  
Ward, Emma B., Helping Teacher  
Lexington  
Duncan, May K., Head, Department of  
Elementary Education  
University of Kentucky

- Ewan, J. V., Elementary Principal,  
Kenwick School  
Henry Clay Boulevard
- Haines, Ruth, Associate Professor of  
Education  
College of Education  
University of Kentucky
- Hartford, Ellis, Professor of Education  
College of Education  
University of Kentucky
- Hilliard, Pauline, University Elementary  
School  
University of Kentucky  
158 Bell Court E
- Holloway, Lucy, Woodstock Farm
- Lacy, Nan, Elementary Supervisor  
City Schools  
120 Walton Avenue
- Molloy, Jeanette  
326 Grosvenor Avenue
- Parker, Ethel L., University of Kentucky
- Ross, C. C., Professor, Education, Psy-  
chology  
College of Education  
University of Kentucky
- Seay, Maurice F., Director, Bureau of  
School Service  
College of Education, University of  
Kentucky
- Spain, Charles R., Associate Professor  
of Education  
University of Kentucky
- Taylor, William S., College of Educa-  
tion, University of Kentucky
- Lobb  
Johnson, Mrs. Woodrow
- London  
Mason, Lela S., Supervisor of Elemen-  
tary Education
- Louisville  
Belcher, E. W., Principal, Elementary  
School  
671 Madlon Court
- Browning, Mary, Supervisor  
Primary Grades, Administration Build-  
ing  
5th and Hill
- Butler, Suda E., Elementary Supervisor  
224 Stiltz Avenue
- Christensen, Martha, The Puritan
- Clarke, M. J., High School Supervisor  
Jefferson County  
618 West Jefferson Street
- Cooper, J. Bryant, Supervising Principal  
3212 Dumesnil Street
- Dunn, Ruth, Primary Supervisor  
Jefferson County Schools  
618 West Jefferson Street
- Esch, Bianca, Elementary Principal  
1857 Princeton Drive
- Fahey, Julia, Directory Guidance,  
Jefferson County  
618 Jefferson Street
- Gibbs, Minnie, Elementary Teacher  
124 Crestmoor
- Howard, Bonnie C., Supervisor, Inter-  
mediate Grades  
409 Kensington Court
- Kammerer, Margaret L., Music Super-  
visor  
100 Broun's Lane
- Martin, Ruth, California School  
1638 West Kentucky Street
- McKee, Josephine, Elementary Principal  
1522 Edgewood Place
- Oppenheimer, J. J., Head of Education  
and Dean of College of Arts and  
Sciences  
2818 Saratoga Drive
- Schmitko, Aileen, Principal  
300 East Chestnut Street
- Seekamp, Adelaide, Elementary School  
Principal  
1634 Lucid
- Wheeler, Virginia  
618 West Jefferson Street
- Maysville  
Martin, Robert, Principal  
Woodleigh School
- McLain, Alma, Principal  
First District School
- Rogers, Emory, Superintendent, Mason  
County Schools
- Morehead  
Alfrey, Mabel  
Cecil, Eunice  
Evans, Thelma, Critic Teacher  
Morehead Teachers College
- Neal, Edna, Supervising Teacher  
State Teachers College  
440 Main Street
- Rice, Mrs. W. H., Morehead High  
School
- Morgantown  
Hood, Lucille, Attendance Supervisor
- Ragland, Anna Lou, Helping Teacher
- Murray  
Ray, Annie, Supervisor, Training  
School  
Teachers College
- Smith, Rubie, Critic Teacher  
State Teachers College
- Suter, Lottie, Critic Teacher  
State Teachers College
- Nebo  
Barron, Sarah
- Newfoundland  
Dickerson, Ernestine T., Supervisor
- Newport  
Wilmoth, L. May, Elementary Super-  
visor, Board of Education
- Olive Hill  
Coleman, Mrs. Norbeth, Supervisor  
Box 492
- Owensboro  
Moore, Bess, Elementary Supervisor  
518 Allen
- Settle, Margery L., Supervisor of  
Daviess County Schools
- Paducah  
Cooper, D. T., Director of Instruction  
Paducah Public Schools
- Morris, Marell, Helping Teacher  
R. F. D. 2
- Paris  
Lytle, Mrs. William, Helping Teacher  
Bourbon County
- Penbroke  
Stamper, Mary E.  
R. F. D. 2
- Pikeville  
Hatcher, Carl, Supervisor
- Prestonburg  
Martin, Henry, Elementary Supervisor,  
Floyd County
- Richmond  
Ferrell, D. Thomas, Head, Education  
Department  
Eastern State Teachers College
- Hansen, May C., Associate Professor of  
Education  
532 Main Street
- Lingenfelter, Margaret, Critic Teacher,  
Training School
- Simmons, Elsie W., Elementary Super-  
visor  
Logan County



- Ruth  
Allen, Mrs. Eugene, Helping Teacher,  
Pulaski County
- Salyersville  
Dunn, Olga Marie Prater, Supervisor
- Savoy  
Angel, Flossie
- Settle  
Allen, Ida Nell, Elementary Supervisor,  
Allen County
- Somerset  
Broyles, Irene P.  
401 North Main Street  
Hamm, Mary E., Teacher  
200 Jarvis Avenue
- Stanton  
Bowen, Maude, Elementary Supervisor  
Powell County
- Stone  
Coleman, Mabel
- Sturgis  
Evans, H' Earl, Principal  
814 Kelsey  
Peyton, Lillie K., Mathematics Teacher  
12th Street
- Summerville  
Henderson, Sybil, Helping Teacher
- Swamp Branch  
Caudill, Margie, Helping Teacher  
Holliday, Daisy S., Helping Teacher,  
Mageffin County
- Tompkinsville  
Eubank, Mrs. Clyde, Elementary Super-  
visor  
Monroe County, Box 142
- Welchburg  
Shepherd, Mayme, Helping Teacher,  
Jackson County
- West Liberty  
Fairchild, Melda C., Elementary Super-  
visor  
Morgan County
- White Plains  
Winstead, Ora M., Principal
- Whitesburg  
Brown, Myrel C., Helping Teacher  
Sexton, Agnes
- Williamsburg  
Diseker, Mildred, Helping Teacher
- Whitley City  
Taylor, Loma J., Helping Teacher,  
McCreary County
- Winchester  
Rupard, Nancy  
R. F. D. 1  
Young, Lulu B.  
135 Winn Avenue
- LOUISIANA
- Alexandria  
Aiken, E. S., Supervisor and State Di-  
rector of Curriculum  
Rapides Parish, School Board
- Slocum, J. S., Parish Supervisor,  
School Board Office
- Tubre, B., Principal  
Rosenthal Grammar School  
1712 Monroe
- Amite  
Corkern, J. F., Supervisor  
Tangipahoa Parish School Board
- Arcadia  
Brown, R. A., Supervisor  
Bienville Parish School Board  
McCleish, D. W., Supervisor  
Bienville Parish School Board
- Bastrop  
Haws, Maggie, Supervisor of Schools
- Baton Rouge  
Arceneaux, J. J., Assistant Supervisor  
of Vocational Agriculture  
Department of Education
- Coble, Madge A., Louisiana State Uni-  
versity & Agriculture & Mechanical  
College University Station
- Cunningham, Pauline, Home Economics  
Education  
Box 8584, Louisiana State University  
Emmons, S. R., Supervisor of Social  
Studies  
Department of Education
- Evans, Roy, Elementary Supervisor  
State Department of Education
- Hanche, Ethel, Supervisor  
Louisiana State University Laboratory  
School  
University Station
- Hefley, Sue, Supervisor School Libraries  
State Department of Education
- Lane, Caro, State Supervisor of Health  
State Department of Education  
State Capitol Building
- Mobley, Mrs. Clyde, State Supervisor  
of Home Economics  
Louisiana State Department of Edu-  
cation
- Schmalzrid, Alma, Supervisor of Pri-  
mary Grades  
Department of Education
- Tomlinson, Lela A., Assistant State  
Supervisor of Home Economics  
State Department of Education
- Trezevant, Blanche, Supervisor,  
English and Language Arts  
State Department of Education
- Williams, J. E., Supervisor of Negro  
Education  
Department of Education
- Braithwaite  
Davis, Beatrice, Parish Supervisor of  
Instruction
- Converse  
Norred, J. W., Principal
- Coushatta  
Morgan, P. L., Principal  
Martin High School  
R. F. D. 2
- Creole  
Hackett, N. B., Supervisor  
Cameron Parish Schools
- Donaldsonville  
Richards, Georgette, Materials and  
Library Supervisor  
Ascension Parish
- Dry Prong  
Morris, M. L., Principal  
High School
- Grambling  
Dickerson, Bessie E., Teaching  
Grambling College, Box 71
- Maxie, Earl, Dean of Men  
Grambling College
- Jonesboro  
Woodard, C. T., Supervisor of Schools  
Jackson Parish School Board
- Lafayette  
McBride, A. A., Lafayette Parish  
Supervisor
- Nichols, Helen, Associate Professor,  
Home Economics  
Southwestern Louisiana Institute
- Rowe, Inez, 2nd Grade Teacher  
119 West Convent
- Lake Charles  
Collette, Mabel, Supervisor of Primary  
Grades  
Calcasieu Parish School Board

- Lake Providence  
 Walsworth, M. M., Supervisor  
 East Carroll Parish Schools  
 Mansfield  
 Johnson, Elizabeth M.  
 Box 814  
 Tharp, Fanny Rives, Parish Supervisor,  
 Box 45  
 Maringouin  
 Marionneaux, P. E., Principal  
 Shady Grove School  
 P. O. Drawer 58  
 Marksville  
 Ducote, S. C., Supervisor  
 c/o Avoyelles Parish School Board  
 Guilbeau, Lolita, Supervisor  
 Minden  
 Craton, Ruby, Supervisor  
 Webster Parish Schools  
 Monroe  
 Oliver, Marjorie  
 210 Louisville Avenue  
 Williams, Chrissie H., Supervisor  
 1419 South Grand Street  
 Natchitoches  
 Burnham, Joy, High School Supervisor  
 205 Cypress Street  
 New Iberia  
 Lee, Lola Bowles, Jeanes Teacher  
 511 East Pershing Street  
 Terrell, Catherine, Elementary Super-  
 visor  
 64 Chestnut St  
 New Orleans  
 Abodie, Lauraine M., Principal  
 1651 North Tonti Street  
 Bassich, Joseph B., Professor of Edu-  
 cation  
 6363 St. Charles Avenue  
 Bauduit, A. Leonie, Principal  
 4849 Chestnut Street  
 Best, Camilla, Head, Division Audio-  
 Visual Aids  
 1835 Erato Street  
 Brummerhof, Edna G., Principal, Edu-  
 cation  
 5850 Vicksburg Street  
 Council, Sallie, Principal  
 1932 Touro Street  
 Dedeaux, Maude R., Principal  
 3425 La Salle Street  
 Doerr, Lorette R., Principal  
 721 St. Philip Street  
 Drysdale, Hazel, Principal  
 1937 General Pershing Street  
 Ferran, Rose, Primary Supervisor  
 3515 Napoleon Avenue  
 Fougerat, Hazel M., Elementary  
 Principal  
 960 Wilson Drive  
 Green, Thomas, Supervisor  
 407 Hillary Street  
 Harris, Margaret, Dean of Lower School  
 Metairie Park Country Day School  
 Metairie Park  
 Hinrichs, Amy H., Principal  
 Robert M. Lushes School  
 315 Willow Street  
 Janvier, Carmelite, Director, Division  
 of Special Service, New Orleans  
 Public Schools  
 703 Carondelet Street  
 Keitz, Henrietta C., Principal  
 Gentilly Terrace School  
 4720 Painters Street  
 Longe, George, Principal  
 Macarty School  
 1605 Caffin Avenue  
 Markey, Ruth, Supervisor  
 6038 Canal Boulevard  
 Meyer, Elsie H., Principal  
 2733 Esplanade Avenue  
 Molony, A. J., Principal  
 B. M. Palmer School  
 2306 Peniston Street  
 Poncet, Aimée J., High School Super-  
 visor  
 School Administration Building  
 703 Carondelet Street  
 Rein, Sophronia, Principal  
 8217 Maple Street  
 Rhodes, Anna B., Principal  
 4617 Loyola Avenue  
 Roy, Jeanne, Specialist in Homemaking  
 703 Carondelet Street  
 Ruffo, Leona B., Principal  
 2215 Pine Street  
 Thomas, Christine Duvigneaud, Teacher  
 1712 St. Philip Street  
 Thomas, Josephine, John McDonough  
 High School  
 Esplanade Avenue & Dorgenois  
 Street  
 New Roads  
 Robertson, J. B., Supervisor  
 Pointe Coupee Parish Schools  
 Opelousas  
 Auzenne, Anita D., Jeanes Supervisor  
 Box 727  
 Plaquemine  
 Landry, Thomas, Supervisor of Instruc-  
 tion  
 Rayville  
 Miller, Blanche, Supervisor of Instruc-  
 tion  
 Richland Parish Schools  
 P. O. Box 396  
 Ruston  
 Emmens, Morelle, Principal, Elementary  
 Schools  
 Noah, D. P., Principal  
 700 West Alabama Avenue  
 Talbot, Lillian, District Supervisor of  
 Home Economics  
 Box 315  
 Woodard, Helen, Teacher, Personnel  
 Adviser  
 Division of Extension  
 LaPolytechnic Institute  
 Shreveport  
 Goldenberg, Rachel, Principal  
 142 Herndon  
 Snelling, Vern, Elementary Principal  
 114 Preston Avenue  
 Taylor, Elizabeth, Assistant Superin-  
 tendent  
 School Board Office  
 501 Court House  
 Tioga  
 Aiken, E. H.  
 Winfield  
 Schwartz, H. O., Supervisor of Instruc-  
 tion  
 Winnsboro  
 Nelson, Bertha G., Supervisor of Schools  
 Box 231  
 MAINE  
 Auburn  
 Westerberg, Arnold, Principal  
 Edward Little High School  
 Augusta  
 Gordon, Zelda J., State Supervisor of  
 Elementary Education  
 111 Western Avenue

- Hayden, Villa E., Field Supervisor of Rural Education  
State House, Department of Education  
Hutchinson, Earl, Director of Secondary Education  
State Department of Education  
Ladd, Harland A., Department of Education  
State House  
McAllister, Muriel A., Elementary Supervisor  
48 North Belfast Avenue
- Bangor  
Evans, Eleanor, Elementary Supervisor  
246 Essex Street
- Bath  
Ferguson, Priscilla, Supervisor of Elementary Education  
Kearney, Phyllis H., Supervisor of Elementary Education  
School Department
- Cherryfield  
Leach, Roland M., Superintendent, Maine Union School  
District #99
- Ellsworth  
Estey, Mildred F., R. F. D. 1
- Farmington  
Cox, Julia B.  
34 High Street
- Graham  
Upton, Ethelyn F., Director of Student Teachers  
Graham State Teachers College
- Gray  
Cobb, Beatrice, Principal
- Kennebunk  
Dresser, Irene L., State Supervisor of Elementary Education  
12 High Street
- Orono  
Foster, Frank C., School of Education  
University of Maine  
Hall, Joseph I., Assistant Professor.  
University of Maine  
School of Education, Audio-Visual Service
- Portland  
Soule, Clara L., Director of Reading  
180 High Street
- Rockland  
Hunt, R. B., School Department
- MARYLAND
- Baltimore  
Alder, Grace, Supervisor of Elementary Schools  
Department of Education, Lexington and Liberty Streets  
Bard, Harry, Curriculum Specialist  
3 East 25th Street  
Blackiston, Nanette R., Mathematics Supervisor,  
725 Gorsuch Avenue  
Broening, Angela M., Assistant Director of Research  
Baltimore Public Schools, 3 East 25th Street  
Brooks, Mary N., Department of Education  
Division of Colored Schools, Madison and Lafayette Avenue  
Brown, Edward W., Headmaster Calvert School  
105 Tuscany Road  
Chambers, Helen L., Supervisor of English Department of Education  
3 East 25th Street
- Dost, Katherine M., Elementary Supervisor  
531 Register Avenue  
Gaskin, Emma F., 1224 Druid Hill Avenue  
Girardin, Evelyn R., Department of Education  
3 East 25th Street  
Gray, Nellie V., Supervising Principal  
504 Dunkirk Road  
Huffington, Paul E., Supervisor of Colored Schools  
State Department of Education, Lexington Building  
Jesson, Jennie E., Supervisor, Baltimore County Board of Education  
200 West Saratoga Street  
Johnson, Marion C., Director of Student Teaching  
1513 Druid Hill Avenue  
Latshaw, Harry F., Director, Division of Special Education  
Department of Education  
3 East 25th Street  
Mixer, Helen, Supervisor of Geography, Department of Education  
3 East 25th Street  
Mooris, Mary V., School 128  
Schroeder and Pierce Streets  
Myers, Edythe D., Supervisor  
509 W. Lafayette Avenue  
O'Toole, James B., Jr., Supervisor of Junior High Schools  
4103 The Alameda  
Pierson, Mildred R.,  
329 N. Calhoun Street  
Rawlings, Beatrice Tate, Supervisor  
718 N. Arlington Avenue  
Sammis, Ethel E., Department of Education  
20th Floor, Lexington Building  
Lexington and Liberty Streets  
Sisk, Lucetta M., Assistant Superintendent  
200 West Saratoga Street  
Smith, Josie G., Acting Supervisor of English, Junior High School  
2326 Madison Avenue  
Stidham, Alexina G., General Science Supervisor  
Department of Education, 3 East 25th Street
- Bel Air  
Fisher, Hazel L., Supervisor of Elementary Schools  
Board of Education  
Graw, Mary L., Supervisor of Elementary Schools  
Board of Education
- Bethesda  
Cook, Nellie E.,  
4625 Rosedale Avenue
- Centreville  
Stack, Margaret S., Supervisor of Elementary Schools
- Chestertown  
Chambers, Sara B., Supervisor of Elementary Schools  
333 Cannon Street  
Hepbron, Louise, Elementary Supervisor  
Kent County
- Chevy Chase  
Cornell, Florence N.  
6315 Fulton Street
- College Park  
Devilbiss, Wilbur, Principal  
4619 College Avenue

- Prescott, Daniel, Institute for Child Study  
University of Maryland  
Cumberland  
Adams, Ruby M., Director of Elementary Education  
108 Washington Street  
Ashbaugh, Byron L., Fort Hill High School  
Botsford, Jane E., Supervising Teacher  
307 Bedford  
Dean, Myrtle E., Principal, John Hunbird School  
233 Elder Street  
Greene, Winifred, Supervisor  
108 Washington Street  
Shires, Dorothy W., Box 725  
Willison, Mildred E., Board of Education
- Denton  
Thompson, A. May, Supervisor  
Board of Education  
Caroline County
- Ellicott City  
Chadwick, Gail, Supervisor of Elementary Schools  
Murphy, Harry T., Supervisor
- Frederick  
DeLashmutt, Alvida B., Junior High School Teacher  
129 W. Third Street  
Eader, Charlotte  
115 East Church Street  
Thompson, Louise Freeman, Elementary Supervisor  
115 E. Church Street  
Worthington, A. Drucilla  
115 E. Church Street
- Fruitland  
Jones, Martha R., Principal  
Fruitland School
- Gaithersburg  
Bilek, Thomas Vincent, High School Teacher
- Glyndon  
Eckhardt, Myrtle S., Supervising Teacher, Baltimore County
- Grantsville  
Bannatyne, Kate, Garrett County Schools, Supervising Teacher
- Greenbelt  
Fugitt, Elizabeth S., Principal, Center School
- Hagerstown  
Brown, Annilea H., Principal  
Broadway School  
138 Fairground Avenue  
Hoffman, Miriam Lee, Supervisor of Music, Board of Education  
31 S. Prospect Street  
Richardson, Anne H., Elementary Supervisor  
Board of Education  
Stonebraker, Rebekah B.  
P. O. Box 687  
Willis, Benjamin C., Superintendent of Schools  
Board of Education
- Hayre De Grace  
Williams, Percy V.
- Hyattsville  
Hoyle, Mildred  
Apartment J 202, 3900 Hamilton Street  
Petty, Mary A., Hyattsville Elementary School
- La Plata  
Bowie, B. Lucile, Supervisor of Elementary Education
- Lutherville  
Sensenbaugh, James A., Assistant Superintendent  
Ridgely Road  
McDonogh  
Dawson, Leah W., McDonogh School  
Pocomoke  
Downing, Annie Brown, Principal of Elementary and Junior High School.  
411 Bonneville Avenue  
Princess Anne  
Coulbourn, Alice Mae, Supervisor, Board of Education  
Ridgely  
Ward, Lula D., School Principal and Supervisor  
Rockville  
Broome, Edwin W., Superintendent, Public Schools of Montgomery County  
Gore, Lillian, Elementary Public Schools  
Salisbury  
Hall, Lester A., Supervisor of High Schools  
Board of Education, Wicomico County  
Matthews, Anna H., Supervising Student Teacher  
107 East College Avenue  
Phillips, Leah M., Elementary Supervisor, Board of Education  
Silver Spring  
Burch, Willa Carter, Box 253, R. F. D. 2  
Schneider, Fern D., Secondary Supervisor  
1542 Live Oak Drive  
Snow Hill  
Engle, Margaret Laws, Superintendent  
Board of Education  
Towson  
Brennan, Lenora, Lida Lee Tall School  
Maryland State Teachers College  
Kelleher, Mary E., Home Economics and School Lunch Supervisor  
212 Washington Avenue  
Steele, Irene M., State Teachers College  
Upper Marlboro  
Schmidt, William S., Director of Instruction Board of Education of Prince Georges County  
Westminster  
Jenness, S. M., Board of Education, Carroll County

## MASSACHUSETTS

- Amesbury  
Lunt, Mabel E., Principal, Junior High School, 7 Morrill Place
- Amherst  
Bussell, Esther S., Shays Street
- Andover  
Somers, Ruth V.  
Aberdeen Apartments
- Belmont  
Dingley, Vivian A., Principal, Winthrop L. Cheney School, 75 Washington
- Boston  
Anderson, Marion A., Editor, Ginn & Co. Statler Office Building  
Bain, Winifred E., President, Wheelock College  
Riverway and Pilgrim Roads  
Chase, W. Linwood, Boston University School of Education  
84 Exeter Street  
Cole, Eleanor F., The Pilgrim Press, Associate Editor, 14 Beacon Street



- Driscoll, Martina McDonald, Supervisor  
 in Music, 200 Newbury Street  
 Quinnam, Bertha C., Elementary Super-  
 visor, 15 Beacon Street  
 Russell, Karlene V., Bethany Union, 256  
 Newbury Street  
 Serviss, Trevor K., Editor in Charge  
 of Elementary Department, D. C.  
 Heath & Company  
 285 Columbus Avenue  
 Shaver, Rev. Erwin L., Secretary  
 Leadership, Education, Congrega-  
 tional Christian Church  
 14 Beacon Street  
 Wadleigh, Verna L., Ginn and Com-  
 pany, Back Bay, Box N  
 Bridgewater  
 Lindquist, Evelyn R., Principal, State  
 Teachers College Library  
 Brockton  
 Nelson, Edwin A., Superintendent of  
 Schools  
 School Department  
 Brookline  
 Souder, Rexford, Assistant Superin-  
 tendent  
 36 Ackers Avenue  
 Cambridge  
 Burton, W. H., Director of Appren-  
 ticeship, Lawrence Hall  
 Kirkland Street  
 Butler, Elizabeth F., Supervisor of  
 Primary Grades  
 12 Fresh Pond Lane  
 Philbin, Rose E., Supervisor, 1010 Mass.  
 Avenue  
 Dedham  
 Deloura, Bartha A., Supervisor of Ele-  
 mentary Grades  
 511 Washington Street  
 Dorchester  
 Maloney, Mary G., Teacher  
 145 Neponset Avenue  
 East Weymouth  
 Chase, Melissa, Teacher, 829 Com-  
 mercial Street  
 Framingham  
 Reiley, Albert G., Principal, Memorial  
 Jr. High School  
 Haverhill  
 Kett, Mary E., Supervisor, Office of  
 Supervisor of Elementary Educa-  
 tion, Whittier Building  
 Hyannis  
 Lytle, Donald F., Elementary Super-  
 visor, Office of the Supervisor,  
 Training School  
 Leominster  
 Lincoln, Elizabeth M., Elementary  
 Supervisor, 226 Union Street  
 Malden  
 Whitney, Elsie E., 100 Tremont Street  
 Medford  
 Carson, Olive G., Supervisor of Elemen-  
 tary Grades  
 School Department, Hall Avenue  
 Melrose  
 Remon, Marion E., Director of Elemen-  
 tary Education, Office of Superin-  
 tendent of Schools, Main Street  
 Needham  
 Bartell, Madeline E., Supervisor of  
 Elementary Education  
 New Bedford  
 Sweeney, Ellen C., Elementary  
 Supervisor, 48 Morgan Street  
 Newton Centre  
 Colvin, Wilson, J. W. Weeks Junior  
 High School  
 Newtonville  
 Everett, J. B., Director of Instruction  
 100 Washington Park  
 Oak Bluffs  
 Cox, Philip W. L., Professor of Educa-  
 tion  
 Box 663  
 Pittsfield  
 Martin, Lauretta F., Elementary Super-  
 visor  
 17 Hull Avenue  
 Reading  
 Simonds, Arthur D. Jr., Supervising  
 Principal  
 Pearl Street School  
 Shrewsbury  
 Swain, Ethel, Head of History Depart-  
 ment, Beal High School  
 Southbridge  
 Nichols, Marjorie H., Elementary  
 Supervisor  
 School Department  
 Springfield  
 Flagg, Sadie E., Principal, White Street  
 School  
 300 White Street  
 Sauer, Edith, Principal, Lincoln & Jef-  
 ferson Avenue Schools  
 732 Chestnut Street  
 Stoneham  
 Fernow, Alice, Elementary Supervisor,  
 6 Winthrop Street  
 Varney, Charles E., Superintendent of  
 Schools  
 Wayland  
 Draper, Mabel S., Elementary School  
 Principal  
 Old Sudbury Road  
 Wellesley  
 Pierce, Arthur E., Superintendent of  
 Schools  
 Wellesley Hills  
 Wilson, Guy M., Professor of Emeritus,  
 School of Education, Boston Uni-  
 versity, 30 Pine Street  
 West Newbury  
 Page, John C., Superintendent of Schools  
 West Roxbury  
 Bigg, M. Virginia, Supervisor  
 10 Sunnybank Road  
 Wilkinson, Helen S., Elementary  
 Supervisor  
 160 Park Street  
 Worcester  
 Foster, Elizabeth V., Director of Train-  
 ing  
 State Teachers College  
 Wesley, Marian J., Supervisor of Ele-  
 mentary Education  
 Room 14, City Hall  
 Wilmarth, Madeline A., Supervisor of Stu-  
 dent Teachers  
 531 Chandler Street

## MICHIGAN

- Adrian  
 Alexander, Effie, Supervisor of Elemen-  
 tary Schools  
 153 East Church Street  
 Robinson, Eva  
 340 East Church Street  
 Albion  
 Stephens, Pearl, Critic Teacher  
 215 Austin Avenue  
 Ann Arbor  
 Haisley, Otto W., Superintendent of  
 Schools

- Johnston, Edgar, School of Education  
University of Michigan
- Olson, Willard C., Director of Research  
in Child Development, University  
Elementary School  
University of Michigan
- Rugen, Mabel E., Associate Professor of  
Physical Education and Health,  
4014 University High School  
University of Michigan
- Woody, Clifford, Professor of Education  
School of Education, University of  
Michigan
- Battle Creek**
- Alexander, William M., Director of  
Curriculum and Instruction  
Battle Creek Public School
- Beers, Vivien E., Principal  
N. E. Capital Avenue
- Brouwer, Gertrude A., Principal  
McKinley School, Battle Creek Public  
Schools
- Cornell Theo. A., 77½ N. Washington  
Avenue
- Elliot Keith, 180 North Union Street
- Gerich, Jerry J., 92 West Street
- Halverson, Paul M., 27 East Spaulding
- Hosking, Elizabeth, Elementary Coun-  
sellor
- Battle Creek Public Schools
- Palmer, Eva N., Director of Division  
of Special Services, Willard Library  
Building
- Puffer, Grace M., Principal  
Washington School, Battle Creek Pub-  
lic Schools
- Rogers, Virgil M., Superintendent of  
Schools
- Rupright, Esther, Elementary Principal  
Lincoln School
- Stauffer, Gladys, Junior High School  
Teacher
- Lakeview School
- Sumrill, Donald B., Principal  
Southeastern Junior High School  
Battle Creek Public Schools
- Terwilliger, Ellie T., Elementary Prin-  
cipal, Prospect Street  
Wilson School
- Trudgeon, Paul E., Elementary Prin-  
cipal, 134 Highland Avenue
- Benton Harbor**
- Stapp, Beatrice, Director of Elementary  
Instruction, Office Senior High  
School
- Birmingham**
- Carter, Paul D., Supervising Principal  
744 East Maple Street
- Bloomfield Hills**
- Munshaw, Carroll, Bloomfield Hills  
School
- Buchanan**
- Ekstrom, Lena C., Supervisor  
108 Theoda Court
- Coldwater**
- King, Ira F., Superintendent of Schools
- Dearborn**
- Bennett, H. K., Assistant Superintendent  
Dearborn Board of Education, 5757  
Neckel
- Betts, Amy, Assistant Principal  
Dearborn High School
- Wellever, Edith L., Rural Supervisor,  
22517 Law
- Detroit**
- Althouse, A. D., Supervisor of Voca-  
tional Education  
467 W Hancock
- Boltz, Joseph K., 436 Merrick
- Boye, Charles L., Associate Professor  
Wayne University, College of Educa-  
tion  
Board of Education
- Brewer, Beulah Cain, Elementary Prin-  
cipal  
5310 24th Street
- Champion, Clara E., Associate Professor  
of Education  
Wayne University,  
467 W. Hancock
- Collins, Laurentine B., Assistant Direc-  
tor School-Community Relations,  
1354 Broadway
- Cooper, Leigh G., Principal  
Edwin Denby High School, 9128 York-  
shire
- Courts, S. A., Professor of Education  
University of Michigan & Wayne  
University  
9110 Dwight Avenue
- Dimond, Stanley E., Director  
Citizenship Education Study  
Detroit Public Schools and Wayne  
University, 436 Merrick
- Durgan, Guy A., Principal  
4209 Seneca
- Faunce, Roland C., Associate Professor  
of Education  
College of Education, Wayne Uni-  
versity  
5258 2nd Blvd.
- Hanlon, Helen J., Supervisor of In-  
struction  
Division of Instruction, 467 West  
Hancock
- Irwin, Manley E., Division Director of  
Instruction  
467 W. Hancock Avenue
- Jameson, Mary S., Supervising Teacher  
2615 Barlum Tower
- Kelley, Earl C., Associate Professor of  
Education, Wayne University, 467  
W. Hancock
- Mayer, Jane, Supervisor, Health and  
Physical Education, Detroit Public  
Schools
- Mulder, Fred J., Head of Mathematics  
Department  
Edwin Denby High School  
12800 Kelly Road
- Pendergast, Winning S., Assistant Di-  
rector Department of School Lunch-  
rooms, Board of Education
- Peters, Mildred, 436 Merrick
- Rankin, Paul T., Assistant Superin-  
tendent  
16823 Plainview Road
- Shelters, Mildred, Principal  
Hotel Yorba, 4020 W. Lafayette
- Sister M. Amadeus  
Marygrove College  
8425 West McNichols Road
- Stone, R. H., Manufacturer of Educa-  
tion Equipment, P. O. Box 414
- Swan, Agnes E., Supervisor  
Handwriting and Spelling  
2281 West Grand Boulevard
- Zinn, Roger, Educational Consultant,  
Jam Handy Organization  
2821 E. Grand Boulevard
- Dundee**
- Ayres, F. M., Superintendent  
Dundee Public Schools
- East Lansing**
- Gutzler, Grace, 114 Charles Street  
Hill, Guy H., Professor, Division of  
Education  
Michigan State College
- Hood, Georgia H., Health Consultant  
203 Michigan Agriculture College

- Hugget, Albert J., Division of Education  
Michigan State College  
Johnson, Lois V., Assistant Professor of  
Education, Michigan State College  
Millard, Cecil V., Director of Division  
of Education  
Michigan State College  
Escanaba  
Stenson, Helen Elaine, School Supervisor  
Flint  
Conoboy, Catharine, Elementary Super-  
visor  
318 West 2nd Street  
Grand Haven  
Kaufman, Jennie M., County Helping  
Teacher  
Court House  
Grand Rapids  
Barnes, Marcellene, Oakdale and  
Alexander Schools  
McCall, Lucie Ann, 165 Lyan Street  
Shimel, Vesta M., Supervisor of Ele-  
mentary Grades  
143 Bostwick Avenue, N. E.  
Highland Park  
Robinson, Roy E., Elementary Principal  
143 Farrand Park  
Shibler, H. L., Superintendents Office  
12541 Second Avenue  
Iron Mountain  
White, Grace, Elementary Supervisor  
315 West B. Street  
Wyant, Helen I., 726 Hill  
Jackson  
Andros, Marian C., Art Supervisor  
808 First Street  
Sommers, Mildred E., Director of Ele-  
mentary Education, City Public Schools  
Waldorf, Letha, Principal  
811 Audubon  
Kalamazoo  
Frederick, O. I., Western Michigan Col-  
lege of Education  
Graybill, Clara, Director of Elementary  
Education, 428 West South Street  
Guzwak, Frances M., 1001 Bryant Ave-  
nue  
Jones, Mary Elizabeth, Critics,  
703 West Cedar Street  
Robinson, William McKinley, Director  
Department of Rural Education  
Western Michigan College  
1414 Low Road  
Shimmel, Ethel, 118 Buckley Street  
Steele, Roxana A., Western Michigan  
College  
Stinson, Bess, Training School  
Western Michigan College of Edu-  
cation  
Warner, Mary M., Kalamazoo College  
Lake Orion  
Kirkpatrick, Vena B., Elementary  
Supervisor  
Lake Orion Community School  
Lansing  
Ellingson, Evelyn A., Regional Con-  
sultant, Public Health Nursing,  
Michigan Department of Health  
Koopman, G. Robert, Assistant Super-  
intendent  
Department of Public Instruction  
Lewton, Opal S., 806 West Michigan  
McClench, Marion H., Editor  
Department of Public Instruction  
Stevenson, Elizabeth, Division of Adult  
Education  
State Department of Public Instruction  
Toogood, Mildred, Eastern High School  
Waskin, Leon S., Chief Director of  
Instruction  
Department of Public Instruction  
Marquette  
Fox, Olive G.  
Marshall  
Crawford, Dorcas, Reading Consultant  
505 West Green  
Midland  
McKenney, Jean E., Court House  
Mt. Clemens  
Everill, Winifred, Elementary Supervisor  
197 Cass Avenue  
Lee, Will L., County Commissioner  
County Building  
Mt. Pleasant  
Heilbronn, Edna M.,  
Supervisor of Practice Teaching  
810 South College Avenue  
Martin, Frances K., Consultant in Ele-  
mentary Education  
Central State Teachers College  
Millar, Margaret S., Head of Art De-  
partment  
1028 South Franklin  
Park, Charles B., Superintendent of  
Schools  
Mt. Pleasant Public Schools  
Muskegon  
Hansen, Mary Ann, Director  
Hackley School  
Muskegon Heights  
Moore, Beatrice M., Supervisor,  
Elementary, Muskegon Heights Public  
Schools  
Niles  
Berger, Pearl, Supervisor  
540 Cedar Street  
Plymouth  
Reincke, Donna V., Plymouth High  
School  
Watson, Ada, Supervising Teacher  
602 Coolidge Street  
Port Huron  
Crull, Howard D., Superintendent of  
Schools  
Seibert, Aylene, Secondary School  
Supervisor  
1111 Beers Street  
Saginaw  
Haley, Nelle, Director of Elementary  
Education, 620 South Jefferson Street  
Zipp, Ethel, Teacher  
1021 Burt Street  
Trenton  
Anderson, J. L., Superintendent of  
Schools  
2340 Third Street  
Van Dyke  
Truax, James L., Superintendent  
22100 Federal Avenue  
Walled Lake  
Gregor, Kathleen, Elementary Super-  
visor  
Walled Lake Consolidated Schools  
Warren  
Crofoot, Bess L., Elementary Supervisor  
Wayne  
Openlander, Stuart L., Superintendent  
of Schools, 3252 Third Street  
Randall, Don, Wayne High School  
Ypsilanti  
Garrison, Noble Lee, Head of Depart-  
ment of Education  
Michigan State Normal College  
O'Connor, M. Ethel, Michigan State  
Normal College

# LIST OF MEMBERS

Jefferson City  
 Martinson, D. F., State Supervisor of  
 Negro Schools, Capitol  
 Summers, Arthur, Director of Super-  
 vision  
 State Department of Education  
 Woods, Clara W., Itinerant Teacher  
 Department of Home Economics  
 Lincoln University  
 Joplin  
 Wood, Reis, Superintendent  
 827 Pearl  
 Kansas City  
 Angstadt, Ruth Ann  
 4535 Main  
 Blackburn, Helen I., Principal  
 3401 South Benton  
 Cusack, Alice M., Director, Kindergar-  
 ten-Primary Grades  
 210 Library Building, Ninth and  
 Locust Streets  
 Fleischaker, Ruth R., Sixth-Saving Class  
 Teacher  
 c/o Colham Apt. Hotel, Apt. 405,  
 2718 Linwood Boulevard  
 Gillert, A. W., Director  
 Schools #216  
 Office of the Superintendent  
 Kansas City Public Schools  
 Henderson, Barbara, Director, Inter-  
 mediate Grades  
 Rockhill Manor, 43rd and Locust  
 Streets  
 Hunt, Dr., Superintendent's Office  
 201 Library Building  
 9th and Locust Streets  
 Myers, Anna G., Assistant Director of  
 Research, 217 Library Building  
 O'Keefe, Patrick, Director of  
 Health and Physical Education,  
 3408 Kenwood  
 Prevoy, Esther, Director Family Life  
 Education Dep.,  
 4423 Olive Street  
 Robinson, Viola J., Principal  
 1514 Campbell  
 Watrons, Mary L., Principal  
 2640 A. Euclid Avenue  
 Kennett  
 Ridings, G. H., County Superintendent  
 107 Cedar  
 Kirkwood  
 Maull, Gertrude B., Director, Pre-School  
 820 E. Argonne Drive  
 Neville, Mark  
 Maryville  
 Bishop, Clifford L., Chairman  
 Department of Education, Northwest  
 Missouri State Teachers College  
 Hart, John L., Social Science Depart-  
 ment  
 State Teachers College  
 Milikan, Chioe E., Director  
 Early Childhood Education  
 Northwest Missouri State Teachers  
 College  
 Perryville  
 Hoos, Ida M.  
 Richmond Heights  
 Young, Ira H., Professor of Education  
 7529 Wise Avenue  
 Springfield  
 Brown, Margaret, Principal  
 704 East Grand  
 Deveraux, May  
 Bowerman School

MISSISSIPPI  
 Hattiesburg  
 Stevens, Nora, Principal Elementary  
 School, 209 South 31st Avenue  
 Jackson  
 McKee, Clyde V., State Rural and Ele-  
 mentary Supervisor, State Depart-  
 ment of Education  
 Patterson, D. R., Director of Instruction  
 State Department of Education  
 Touchstone, T. N., Director of Instruc-  
 tion  
 State Department of Education  
 Meridian  
 Majure, Gusie, Principal  
 2408 9th Street  
 New Albany  
 Collins, Mary E., Supervisor  
 Elementary Schools  
 Oxford  
 Price, Holleman  
 1007 South 2nd Street  
 Richey, Elizabeth  
 Elementary Supervisor  
 Pascagoula  
 Bond, Ada, Elementary Supervisor  
 Jackson County  
 Philadelphia  
 Land, Jimmie, Elementary Supervisor  
 Box 338  
 Ripley  
 Kaffir, T. J., Elementary Supervisor  
 Elementary Schools  
 State College  
 Wetherby, Mary E., Associate  
 Professor  
 Home Economics Education  
 Mississippi State College  
 MISSOURI  
 Bloomfield  
 Knight, Riley F., Superintendent of  
 Schools  
 Boone County  
 Martin, R. Lee, R. F. D. 1  
 Brown Station  
 Cape Girardeau  
 Schultz, L. J., Superintendent  
 Cartwell  
 Keith, L. G., Superintendent of Schools  
 Consolidated School  
 Cardwell  
 Chillicothe  
 McIvry, Maud Edwards, Teacher  
 P. O. Box 172  
 Stewart, Anne A.  
 c/o Joseph D. Stewart  
 Clayton  
 Byerly, Carl L., Principal  
 6500 Wydown Boulevard  
 Columbia  
 Bottrell, Harold R., Director  
 Burrall Service Projects  
 1207 University  
 Charters, W. W., Stephens College  
 Farthing, Dorothy  
 Johnson, B. Lamar, Dean of College  
 and Library, Stephens College  
 109 Frederick Apt.  
 Phillips, C. A., Professor  
 Room 209 Education Building  
 University of Missouri  
 Evans, W. L., 1 West 10th Street  
 Independence  
 Keith, L. G., Superintendent of Schools



## MINNESOTA

- Albert Lea  
Ivey, Mae J., Supervisor of Elementary  
Grades, 316 Vinehurst  
Coleraine  
Kearney, Dora E., Box 763  
Croskron  
Sister Agnes, Convent St. Joseph, 314  
Duluth  
Ely, Pauline, State Teachers College  
Donnelly, Frances M., Art Supervisor  
Fartbaul  
Memorial High School  
Ridgely, Marguerite, Elementary Super-  
visor Fartbaul Public Schools  
Grand Rapids  
Murphy, Edna I., Supervisor, School  
District #1  
Box 354  
Hibbing  
Nolte, Karl F., Director of Elementary  
Education  
Hibbing High School  
Manakato  
McCarthy, Rhea, Elementary Supervisor,  
Lincoln School  
Wickering, Anna M., Principal, College  
Elementary School, State Teachers  
College  
Minneapolis  
Bastion, Ethel, Grade Supervisor  
St. Louis Park Public Schools  
Brauchamp, Mary L., 305 City Hall  
Boardman, Charles W., Professor of  
Education  
Director of Student Teaching  
4500 Upton Avenue South  
Bossing, Nelson L., Professor, College  
of Education, University of Minne-  
sota  
Brueckner, Leo J., Professor of Ele-  
mentary Education, University of  
Minnesota  
Carlton, Mary E., Principal, Hiawatha  
School  
42nd Avenue South and East 42nd  
Street  
Carlson, Ida C., Elementary Principal  
Penn School  
Cook, Lucila B., Curriculum Consultant,  
305 City Hall  
Cook, Walter W., Associate Professor of  
Education  
305 Eddy Hall, University of Minne-  
sota  
Cutright, Prudence, Assistant Superin-  
tendent of Schools, 305 City Hall  
Gillchrist, Robert S., 306 City Hall  
Goslin, William E., Superintendent of  
Schools, Board of Education  
Grim, Paul R., Professor of Education  
University of Minnesota  
Hood, Edith G., Principal  
2328 Seabury  
Jasperson, Lillian, Principal, Brainerd  
School, 38th Street and 13th Avenue  
Johnson, Genevieve, Senior Consultant  
in Home Economics  
305 City Hall  
Kennedy, Fern, Rural School Supervisor  
Apt. 104, 1127 4th Avenue South  
Knox, Bess J., Elementary Principal  
1822 Emerson Avenue  
Lichtenberger, J. F., Principal  
Seward School, 24th Street and 28th  
Avenue South
- Brother J. Leo, St. Mary's College  
born St.  
Jensen, Myrtle E., Elementary R. San-  
Curriculum Coordinator, 67  
Winona  
Sister M. Edith, Principal  
Sacred Heart High School  
Wasca  
Schools  
Sorensen, R. R., Superintendent of  
Tracy  
26 East Exchange Street  
St. Agatha's Conservatory  
visor  
Sister Mary Ellen, Community Super-  
Baker Schools, 622 Grand Avenue  
Roverud, Ella M., Principal Gordon and  
2220 Como Avenue  
Loughrree, Mildred, Guttersen School  
Keeney, Nolan C., Assistant Super-  
intendent, Department of Education  
University of Minnesota  
Home Economics Education  
Rose, Ella J., Assistant Professor of  
State Department of Education  
301 State Office Building  
Elementary and Secondary Schools  
Andrews, Walter A., Director of Edu-  
cation  
St. Paul  
Boulevard  
Bastion, Ethel M., Supervisor, elemen-  
tary instruction, 5220  
Central Junior High School  
St. Louis Park  
Van Brussell, Martha, Grade Supervisor  
506 Second Avenue South  
Teaching  
Pauli, Mabel A., Director, Off-Campus  
State Teachers College  
Headley, J. W., President  
St. Cloud  
Room 101  
Education, Coffman Building.  
Pritztau, P. T., Director, Elementary  
Schools  
Rochester  
Anderson, Hazelle M., Rochester Public  
Schools  
Ferguson, Jean, 521 West Sixth  
Red Wing  
Nelson, Ethel V., Supervisor, elemen-  
tary Grades, Box 107  
Mountain Iron  
Steele, L. H., State Teachers College  
Moorehead  
and 33rd Street  
Cooper School, 44th Avenue South  
Waller, Beulah, Principal  
Taylor, Jessie E., 248 Courthouse  
2852 Ottawa Avenue  
Siemer, Eugenia M., Consultant  
5133 Nicollet Avenue  
Scribner, Ruth G., Science Consultant  
1000 University S. E.  
Education  
Raymond, Ruth, Professor, Art  
52nd Street  
Keewaydin School, 30th Avenue and  
Peterson, Edith, Principal  
Board of Education, 305 City Hall  
Newell, Bernice, Supervisor of Instruc-  
tion  
Lytle, Carlton W., Principal Emerson  
Bremer School, Lowry and  
North

Manley, Benton C., Senior High School  
 Manuel, Des-a Jane, Supervising Principal, 817 East Belmont  
 Oliver, Stanley C., Professor of Education  
 State Teachers College  
 Pittman, Alice, Elementary Supervisor  
 Ambassador Apartments  
 Sperry, Lochie E., Supervisor of Language Arts  
 940 North Jefferson  
 St. Joseph  
 Blackwell, G. L., Superintendent of Schools  
 10th and Felix Streets  
 St. Louis  
 Andrews, David K., Principal  
 5539 Page Boulevard  
 Armstrong, Arthur, Assistant Director  
 American Junior Red Cross  
 1709 Washington Avenue  
 Bahn, Dorothy C., 4231 Lee Avenue  
 Bahn, Lorene A., 4231 Lee Avenue  
 Boss, Mabel E., 4961 Laclede Avenue  
 Boswell, Nellie R.  
 7312 Burrwood Drive  
 Buerkle, Margaret  
 6040 Kingsbury  
 Buerkle, Mary Elizabeth  
 6040 Kingsbury  
 Bush, Mildred B., Primary Supervisor  
 6897 Waterman Avenue  
 Casey, Martha S., Elementary Principal  
 Bryan Hill School, 2128 Gano Avenue  
 Ellespermann, Margaret  
 3303 Indiana  
 Elliott, Lucy C., Supervisor of Special Schools  
 911 Locust Street  
 Gilliland, John W., Principal  
 Bellevue School, 1027 Bellevue Avenue  
 Kerr, Margaret, Assistant Editor  
 1808 Washington Avenue  
 Lacy, Virginia R.  
 8226 Flora Avenue  
 Ledbetter, Enola, Elementary Teacher  
 6062 Cates Avenue Apt. C-1  
 Lee, Charles A., Professor of Education  
 and Director of Education Services  
 Washington University  
 Long, Ernestine M. J., Normandy High School  
 6701 Easton Avenue  
 Marth, Ella  
 4521A Clarence Street  
 Miller, A. L., Evangelical Lutheran Synod  
 Board for Parish Education  
 3558 South Jefferson Avenue  
 Morgan, Irene, Principal  
 4042 Connecticut  
 Reynolds, Ruth, United Christian Missionary Society  
 2700 Pine Boulevard  
 Schmidt, Julia B., Elementary Principal  
 3328 Wilmington Avenue  
 Saleska, Rev. E. J., Librarian, Concordia Seminary  
 Pritzlaff Memorial Library  
 801 De Mun  
 Seidlitz, Mabel, Primary Supervisor  
 5084 Maple Avenue  
 Sellman, William N., Assistant Superintendent  
 911 Locust Street  
 Seubert, Eugene E., Head of English Department  
 5802 Bartmer

Wahlert, Jennie, District Principal  
 2918 Harper Street  
 Walsh, Hartt J., Washington University  
 Wright, F. L., Head, Department of Education, Washington University  
 Tarkio  
 Croy, Wallace, Superintendent of Schools  
 Trenton  
 Glazebrook, Ruth, Director of Teacher Training  
 513 Linn Street  
 University City  
 Manley, Helen, Director, Health and Physical Education, University City  
 Public Schools  
 Warrensburg  
 Hopkins, Mary Sue, Associate Instructor  
 Elementary Education, Department of Education, 202 Broad  
 Webster Groves  
 Garner, Charles, Assistant Superintendent Board of Education  
 Hanson, George W., Goodall School  
 Jackson, Euris J.  
 1055 Tuxedo Boulevard

## MONTANA

Billings  
 Atkins, Lincoln J., Registrar  
 Dean of Basic College  
 Eastern Montana State Normal  
 Barber, Catherine  
 114 Avenue D  
 Condon, Mary M., Director  
 Student Activities  
 Eastern Montana State Normal  
 Evans, Mary, Assistant Professor of Education  
 2914 7th Avenue North  
 Gallagher, M. C., Superintendent  
 P. O. Box 1677  
 Lausted, Alice, Elementary Principal  
 205 North 26th Street  
 Morton, John A., Dean of Education  
 1409 3rd Street West  
 Peterson, A. B., President  
 Eastern Montana State Normal School  
 Ragsdale, J. G., Principal  
 501 Avenue F  
 Ryan, Valborg H., Critic Teacher  
 425 Lewis Avenue  
 Bozeman  
 Brockman, L. O., Assistant Professor  
 Education and Psychiatry  
 Montana State College  
 Browning  
 Bergan, K. W., Superintendent  
 School District No. 9  
 Schmidt, Florence, Principal  
 Box 58  
 Frenchtown  
 Baldwin, Boyd F., Frenchtown School  
 Great Falls  
 Heaton, Thelma, Consultant in Music  
 43 Stukev Apartments  
 Ryan, Estelle E., Consultant in Elementary Education  
 45 Maryland Hotel  
 Helena  
 Carleton, Linus J., Superintendent of Schools  
 Guillidge, A. O., Department of Public Instruction  
 Ireland, Elizabeth, Superintendent of Public Instruction  
 Peterson, Lilian L., State Department of Public Instruction

Lewistown  
Manning, C. J., Superintendent  
Junior High School Building  
Missoula  
Ames, W. R., Professor of Education  
Montana State University  
Maucker, J. W., Dean  
Montana State University  
Terry  
Stith, Beryl N.

## NEBRASKA

Beatrice  
Burnham, Mary L., Elementary Supervisor  
Box 355  
Chadron  
Ellwood, Robert S., Nebraska State Teachers College  
Grand Island  
Wiltse, Earle W., Superintendent of Schools, 5th at Elm Street  
Hastings  
Aller, Blanche C., Assistant Professor of Education, Hastings College  
Hickman  
Davenport, William F., Superintendent of Schools  
Kearney  
Rice, John D., Superintendent  
Kearney Public Schools  
Lincoln  
Beattie, Merle M., Director of Elementary Education  
Board of Education Office  
Bedell, Ralph C., Teachers College  
University of Nebraska  
Black Leo P.  
State Capitol  
Burnham, Archer L., Executive Secretary  
Nebraska State Teachers Association  
605 South 14th Street  
Davis, Hazel, Assistant Professor  
Elementary Education, Teachers College  
University of Nebraska  
Greer, Edith S.  
1972 Sewell  
Mielenz, Mary M.  
3241 Holdrege  
Morton, W. H., University of Nebraska Teachers College  
Saylor, Galen, Teachers College  
University of Nebraska  
Skudler, Rose  
2603 Washington Avenue  
Sorenson, Frank E., Associate Professor of Education, University of Nebraska  
1344 North 38th Street  
Waite, Evangeline  
1616 G Street  
Wilson, Clara O., Chairman  
Department of Elementary Education  
Teachers College  
University of Nebraska  
McCook  
Jewell, Opal M., Elementary Supervisor  
600 First West  
Nebraska City  
McGaffey, Doris, Guidance Director  
422 South 13th Street  
Omaha  
Hall, Edythe K., Principal  
3629 California  
Marrs, R. M., South High School  
Rainey, Elizabeth, Supervisor of Primary Grades, 1425 South 8th Street

Roys, Cassie F., Principal  
Harrison and Walnut Schools  
2609 Bristol Street  
Taylor, L. O.  
4314 Dodge Street  
Wayne  
Tempero, Howard E., State Teachers College  
Traster, Stella, Supervisor  
909 Lincoln Street

## NEVADA

Carson City  
Bray, Mildred, State Superintendent of Public Instruction  
Las Vegas  
Copenhaver, Roxie, Deputy Superintendent  
Box 390  
Stewart  
Morrison, Ida E., Reservation Principal,  
Carson Indian Agency

## NEW HAMPSHIRE

Concord  
Fuller, Edgar, Commissioner of Education, State House  
Kelly, Grace C.  
30 Church Street  
Lewis, Gertrude M., Elementary Supervisor  
State Department of Education  
Hanover  
Poehler, Paul F., Jr., Superintendent  
Lebanon Street

## NEW JERSEY

Atlantic City  
Batey, Eva, Teacher  
23 North Ohio Avenue  
Bayonne  
Todd, H. H.  
1138 Boulevard  
Belvidere  
Everett, Marcia A., Helping Teacher  
319 Market Street  
Weber, Julia  
303 Third Street  
Berkeley Heights  
Schneider, Bernard W., Box 257  
Emerson Lane  
Blackwood  
Mawson, Doris P., Camden County  
Helping Teacher, Black Horse Pike  
Bloomfield  
Salsbury, Jerome C., Secondary Supervisor, Administration Building  
Broad Street and Belleville Avenue  
Burlington  
Shenpatt, Irene B., Helping Teacher  
232 High Street  
Caldwell  
Noves, Eleanor  
49 A Mountain Avenue  
Camden  
McKendree, E. Wallis, Supervisor  
Elementary Schools  
East Orange  
Hayward, W. George, Principal  
Elmwood School, 6 Emerson Street  
Wardell, Gertrude A., Librarian  
Panzer College of Physical Education  
and Hygiene  
Edgewater  
Conway, William F., Supervising  
Principal

- Elizabeth  
Delaney, Eleanor, Principal  
Woodrow Wilson School #19  
Edgar Road
- Elmer  
Miller, Fannie B., Helping Teacher  
Rural School Supervisor  
413 North Main Street
- Franklin  
Shotwell, Fred C.  
Supervising Principal
- Hackensack  
Demartine, Frank, Teacher  
Director of Health and Physical  
Education, Broadway School
- Hoboken  
Gosch, Olga A.  
809 Hudson Street
- Irrington  
Libby, Herschel S., Superintendent of  
Schools, 1253 Clinton Avenue
- Jersey City  
Carr, Louis D., Principal  
School #23, Romaine Avenue  
Hendrickson, Mary  
27 Sheffield Street  
Keegan, Arthur J.  
99 Romaine Avenue  
Saul, Anna E., Supervisor, Upper  
Grammar Grades  
259 Woodlawn Avenue  
Shaver, John J., High School  
Supervisor, 2 Harrison Avenue  
Weigand, Elsie  
50 Reservoir Avenue
- Leonia  
Caswell, Hollis L., Professor of Edu-  
cation  
209 Hillcrest Avenue
- Lodi  
Sister M. Veronica, Felician Sister,  
O. S. F.  
Immaculate Conception Convent
- Long Branch  
Bergen, Dorothy, Teacher  
Garfield School  
Truesdell, Marguerite, Helping  
Teacher, 389 Bath Avenue
- Madison  
George, Gertrude, Elementary Supervisor  
Central School
- Maplewood  
Lomax, Paul S., Professor of Education  
21 Beach Place
- Merchantville  
Warren, Hope  
3022 Penn Street
- Millburn  
Basler, Roosevelt, Superintendent  
Millburn Township Public Schools  
Salisbury, Carl S., Assistant Principal  
Millburn Township Public Schools  
Millburn High School
- New Brunswick  
Hawkes, Evelyn J., Director  
Student Training, New Jersey College  
for Women
- Morristown  
Keephart, Ariline  
34 Colonial Road
- Newark  
Boutillier, Chairman, Department of  
English  
Central C. & T. High School  
Gaiser, Lillie J., Director of Instruction  
583 Mt. Prospect Avenue  
Phelps, Amelia M., Vice Principal  
Newton Street School
- Taplin, Ida, Supervisor of Speech  
Board of Education  
New Brunswick
- Petersen, Anna J., Supervisor  
Elementary Education  
10 Suydam Street, Apt. 12
- North Bergen  
Shotwell, Harry W., Director of  
Guidance  
40 74th Street
- Orange  
Haynes, Grace B., Elementary Supervisor  
449 Main Street
- Paterson  
Flaharty, William H., Superintendent of  
Schools  
205 County Administration Building  
Masiello, Joseph  
309 East 23rd Street
- Penns Grove  
Sister M. Wenceslaus, St. James High  
School
- Pitman  
Sickler, Edna F., Gloucester County  
Helping Teacher, 61 Pitman Avenue
- Pleasantville  
Helfrich, Eleanor, Director  
Elementary Schools  
201 E. Verona Avenue
- Point Pleasant  
Ballou, John L., Assistant Principal  
High School, 305 New Jersey Avenue
- Red Bank  
Rue, Bessie A., Elementary Supervisor  
Mechanic Street School
- Ridgefield  
Reese, Marian A., Music Supervisor  
Ridgefield Junior High School
- Ridgefield Park  
Forrester, Gertrude, Director  
Guidance, 71 Overpack Avenue
- Ridgewood  
Johnston, Ruth S., Principal  
George Washington Elementary School
- Scotch Plains  
Burd, Philip C., Assistant Principal  
Scotch Plains High School
- Trenton  
Durrell, T. J., Department of Public  
Instruction, Trenton Trust Building  
Finger, Mary H., Principal  
Gregory School  
Foreina, James J.  
116 Parkway Avenue  
Hoppock, Anne, Assistant in Elementary  
Education, State Department of Pub-  
lic Instruction  
Hummer, Myrtle H., Parker School  
Union Street  
Johnson, Eliza  
7 Joane Terrace  
Lawrence, Bertha, Dean of Instruction  
State Teachers College  
Morrison, Howard D., Supervising  
Principal, South Clinton and Park  
Avenues  
Smith, Ethel L., Director, Elementary  
Education, 301 West State Street  
Stryker, Ethel M., Viceprincipal  
Junior High School #5
- Union  
Huntington, Elizabeth A., Classroom  
Teacher  
Livingston School
- Union City  
Gminder, Mrs. G. W., Elementary  
Supervisor  
545 41st Street



Roach, Marian J., Supervisor  
610 15th Street  
Zeilbeer, Charlotte W.  
528 34th Street  
Washington  
Gilliland, E. L., Supervisor  
Principal of Schools, Box 228  
Westfield  
Baldwin, Ruth I., Primary Supervisor  
Franklin School, Prospect Street and  
Newton Place  
Keller, Ethel M., Elementary  
Principal, 711 Glen Avenue  
West Orange  
Johnson, Inez M., Elementary Supervisor  
Board of Education Office  
Woodbridge  
Erb, Ruth E., Chairman of  
Curriculum, 490 Rahway  
Huber, Grace C., High School Librarian

## NEW MEXICO

Albuquerque  
Bigelow, Margaret  
322 North Carlisle  
Heard, Nell D., Supervisor in Indian  
Education  
Indian School  
Mazurek, Eleanor G., Coordinator  
Junior-Senior High School  
3rd and Lead Avenues  
Sister Mary Eva, Dean  
Catholic Teachers College of New  
Mexico  
Indian School Road, Box 671  
Schroeder, Erna, Elementary Supervisor  
816 East Silver Avenue  
Tireman, L. S., Professor of Education  
453 North Sycamore  
Bernalillo  
Giror, Paul, Supervisor  
Box 56  
Capitan  
Hawkins, E. C., Superintendent  
Public Schools  
Carlsbad  
Brown, George E., High School  
Guidance and Curriculum, 310 East  
Church Street  
Clovis  
Marshall, R. E., Clovis Municipal Board  
of Education  
Pierson, Maude, Rural Supervisor  
Curry County Board of Education  
Deming  
Hosmer, Oscar H., Principal  
608 South Gold Street  
Espanola  
Medina, Edward, Supervisor  
P. O. Box 396  
Las Cruces  
Butcher, Elsa, Elementary Supervisor  
1006 Hinton Avenue  
Las Vegas  
Hays, Louella, Supervisor  
1016 Seventh Street  
Portales  
Friesen, Maria S., Home Economics  
Instructor, Eastern New Mexico  
College  
Mallory, Mrs. A. C., Assistant Professor  
in Education, Box 776  
Raton  
Leason, Marjorie, Elementary Principal  
421 North 4th Street

Roswell  
Totten, Clyde, Elementary Principal  
703 South Michigan Avenue  
Santa Fe  
Barber, Gail N., Directory of Elementary  
Education, Department of Education  
Capitol Building  
Bradley, William T.  
Box 707  
Shiprock  
Kessler, Leola E., Supervisor  
Indian Education  
Tularosa  
Larkin, John L., Superintendent

## NEW YORK

Adams  
Lockwood, Robert  
15 Wardell Street  
Albany  
Carey, Elizabeth B., Division of  
Elementary Education  
New York State Education Depart-  
ment  
Daly, Ronald P., State Education  
Department Room 306  
Ernst, Christine C., Supervisor, Inter-  
mediate Grades  
366 Quail Street  
Babcock, Ruth F. Evans, School Library  
Supervisor  
New York State Department of  
Education  
Hemphill, E. Irene  
11 Ten Eyck Avenue  
Kennedy, Anna Clark, School Library  
Supervisor  
New York State Education Depart-  
ment, 257 State Street  
Lawson, Dorothy S., Supervisor  
University of the State of New York  
State Education Department  
LeBaron, Walter A., Associate Super-  
visor  
University of State of New York  
State Education Department  
Morrison, J. Cayce, Assistant Commis-  
sioner for Research  
State Education Department  
Rappaport, Mary B., Supervisor of  
Health Teaching  
New York State Education Depart-  
ment  
Reeve, Theo, Supervisor  
6 Circle Lane  
Ruef, Werner H., Associate Supervisor  
Elementary Education  
Room 306, State Education Building  
Segner, Esther F., Division of Research  
State Education Building  
Spence, Ralph H., Professor  
State Education Department  
Taylor, Wallace, Albany State Teachers  
College  
Van Cott, Harrison H., Chief  
University of New York State Edu-  
cation Department  
Wasley, Ruth E., Instructor and  
Supervisor in Foreign Languages  
11 South Lake Avenue  
Young, William E., Director  
Division of Elementary Education  
State Education Department  
Zeitler, Mrs. Blodwen Williams  
178 Manning Boulevard South

- Alfred  
 Seidlitz, Joseph, Dean, Graduate School  
 Alfred University  
 Altmar  
 Haine, Chas. H.  
 Amsterdam  
 Bacon, Clara S.  
 41 Division Street  
 Auburn  
 Sullivan, Holmes D.  
 15 Grant Avenue  
 Clark, Anne D., Elementary Teacher  
 397 Owasco Road  
 Aurora  
 Fisher, William S.  
 Baldwin  
 Fitzgerald, James A., Professor of  
 Education  
 Fordham University  
 5 Crocydon Drive  
 Batavia  
 Uphill, J. L. M., District Superintendent  
 Genesee County Building  
 Bay Shore  
 Enlund, Alfred H., Principal  
 16 Second Avenue  
 Binghamton  
 Waterhouse, Lyra A.  
 98 Oak Street  
 Brockport  
 Conradt, Van J.  
 Brockport High School  
 Bronx  
 Nesi, Carmelia, Assistant to Principal  
 1432 Harrod Avenue  
 Bronxville  
 Betzner, Jean, Associate Professor of  
 Education  
 Teachers College, Columbia University  
 262 Pondfield Road, West  
 Borgeson, F. C.  
 Professor of Education, New York  
 University  
 17 Masterton Road  
 Bowler, Nellie A., Kindergarten Super-  
 visor  
 Hotel Granatan  
 Brooklyn  
 Alterman, Harry, Chairman  
 Women's Clothing Manufacturing De-  
 partment  
 2435 Ocean Avenue  
 Banks, Monty, Teacher  
 Health and Physical Education  
 1115 52nd Street  
 Brickman, Benjamin, Department of  
 Education, Brooklyn College  
 Bedford Avenue and Avenue H  
 Bristow, Wm. H., Assistant Director of  
 Reference, Research and Statistics  
 Board of Education  
 110 Livingston Street  
 Ebeling, Elsa, Principal, Public School  
 #208  
 Avenue D and East 49th Street  
 Fane, Arthur, Student  
 5702 14th Avenue  
 Foster, Eleanor W., Director  
 The Community School  
 196 New York Avenue  
 Hughson, Arthur, Principal  
 1412 Caton Avenue  
 Kennedy, Mary A., Assistant Superin-  
 tendent  
 1339 Park Place  
 Kirchenblatt, Alex., Decatur Jr. High  
 School  
 Decatur Street and Lewis Avenue  
 Lefkowitz, Abraham, Principal  
 Samuel J. Tilden High School  
 Tilden Avenue and East 57th Street  
 Obermaier, Blanche  
 645 East 26th Street  
 Richman, J. Maurice, Social Studies  
 Teacher  
 1001 East 9th Street  
 Ross, Jacob M., Principal  
 Midwood High School  
 Bedford Avenue & Glenwood Road  
 Shatinsky, S. I.  
 334 Madison Street  
 Winterble, Margaret, Research Assistant  
 Bureau of Reference  
 Research and Statistics  
 110 Livingston Street  
 Rubenstein, Samuel R., Junior High  
 School 109  
 430 Dumont Avenue  
 Schneider, Perry L., Assistant to  
 Director of Evening School  
 Board of Education, New York City  
 110 Livingston Street  
 Spinner, Jacob, Supervisor  
 805 St. Marks Avenue  
 Wrightstone, J. Wayne, Assistant  
 Superintendent  
 Board of Education  
 110 Livingston Street  
 Buffalo  
 Pratt, Martha S., Head Teacher, Home  
 Economics  
 355 Linwood Avenue  
 Schultz, Frederick, Principal  
 346 North Park Avenue  
 Sipp, Mildred L., State Teachers College  
 Wofford, Kate V., State Teachers Col-  
 lege  
 Cato  
 Peters, Donald F.  
 R. F. D. 1  
 Cattaraugus  
 Babcock, Essie E.  
 District Superintendent of Schools  
 136 South Main Street  
 Cazenovia  
 Stevens, Harvey A.  
 27 Sullivan Street  
 Chittenango  
 Jackson, A. Fern  
 Clark Mills  
 Johns, Alfred S., Clark Mills School  
 Clyde  
 Hydow, Edward C.  
 98 Sodus Street  
 Cobleskill  
 Bent, Roderic E., Student  
 81 North Grand  
 Cooperstown  
 Aspinwall, Charles G.  
 R. F. D. 2  
 Cortland  
 Hutchinson, Roger  
 19 Union Street  
 Danville  
 Dawson, Mildred, F. A. Owens Publish-  
 ing Company  
 Owen, Mary E., Editor  
 F. A. Owen Publishing Company  
 Dewittville  
 Alday, Elizabeth  
 Dryden  
 Swift, Marjorie Alice Critic Teacher  
 Box 238  
 Elbridge  
 Nesbitt, Daniel A.

- Elmira  
 Wall, Osmond  
 1651 West Water Street  
 Endicott  
 McGuinness, Ann G., Elementary  
 Supervisor  
 23 Jackson Avenue  
 Fabius  
 Dunning, Gordon M.  
 Far Rockaway  
 Feldman, Louis, Teacher  
 417 Beach 46th Street  
 Flushing  
 Kengla, Elsie R., Associate Professor of  
 Education  
 Hunter College  
 3007—143rd Street  
 Wayne, Alan, Teacher  
 High School  
 141-21 78th Road  
 Fredonia  
 Altunas, Leo  
 33 Day Street  
 Blom, E. C., Principal  
 State Normal Training School  
 75 Forest Place  
 Burk, Cassie, Supervisor and  
 Instructor in English  
 147 Temple Street  
 Hilton, Ernest, Principal  
 College Elementary School  
 State Teachers College  
 Lange, Phil C., Professor of Education  
 State Teachers College  
 Geneseo  
 Holden, A. John, Coordinator, Field  
 Services  
 78 Center Street  
 Geneva  
 Abraham, George, Geneva High School  
 Scherer, Doris C., Elementary School  
 Supervisor  
 31 Seneca Street  
 Gloversville  
 Painter, Fred B., Superintendent of  
 Schools  
 Great Neck  
 Wiles, Marion E., Administrative  
 Assistant  
 School System  
 Hadley  
 Brown, Clayton, District Superintendent  
 Box 237  
 Henderson  
 Meriweather T., Arthur  
 Hopewell Junction  
 Waterman, C. Paul  
 P. O. Box 73  
 Ithaca  
 Buger, Frank, Student  
 408 North Geneva Street  
 Hutchins, Margaret, Associate Professor,  
 Rural Education  
 208 Stone Hall, Cornell University  
 Klee, Loretta E., Director, Social  
 Studies  
 117 East Buffalo Street  
 Moore, Clyde B., Professor  
 Stone Hall  
 Cornell University  
 Moser, Helen, Assistant Professor  
 New York State College of Home  
 Economics, Cornell University  
 Thurston, Flora M., Professor of  
 Education  
 Stone Hall, Cornell University  
 Jackson Heights  
 Beaumont, Florence S., Principal  
 3323—85th Street  
 Jamaica  
 Breton, Edith H., Public School #82  
 Queens  
 144th Street & 88th Avenue  
 Wallstein, D. Daniel, Principal  
 Edgar D. Shiner Jr. High School  
 Linden Boulevard and 142nd Street  
 Kenmore  
 Gould, Clifford M., Supervisor  
 Elementary Education  
 Kenmore Public School  
 155 Delaware Road  
 Hepinstall, C. Esther, Head  
 English Department  
 Kenmore Senior High School  
 Kingston  
 Dingee, Frieda  
 108 Wilson Avenue  
 Lake George  
 Farrell, Kenneth S., Social Studies and  
 French Teacher  
 Liberty  
 Hunter, Pearl N., Liberty Public School  
 Long Island  
 Bannet, William J.  
 66 Cedar Avenue  
 Patchogue  
 Gastwirth, Paul  
 19-20 80th Street  
 Jackson Heights  
 Reiser, Charles W., Principal  
 Public School 122, Queens  
 21-21 Ditmars Boulevard  
 Long Island City  
 Wolff, Walter H., Principal  
 William Cullen Bryant High School  
 48th Street and 31st Avenue  
 Manhasset  
 Barham, Thomas C., Manhasset High  
 School  
 Marion  
 Dunn, John O., Elementary Supervisor  
 Marion Central Rural School  
 Mosher, Frank K.  
 53 North Main Street  
 Meridian  
 Merrick, Foster K.  
 Box 32  
 Mt Vernon  
 Brayshaw, Evelyn S., Music Teacher  
 673 Locust Street  
 Newcomb  
 Rist, Arnold  
 New Rochelle  
 Baker, Harold V., Principal  
 Daniel Webster School  
 Glenmore Drive  
 Neuner, Elsie Flint, Director of Instruc-  
 tion  
 Department of Education  
 New York  
 Almy, Millie C., Instructor  
 Box 416, Teachers College  
 Columbia University  
 Anderson, Walter A., Chairman, Depart-  
 ment of Administration  
 School of Education  
 New York University  
 Arndt, C. O., School of Education  
 New York University  
 Baar, Lincoln F., Assistant to  
 Principal  
 Junior High School 117  
 Bronx  
 Baker, G. Derwood, Professor  
 School of Education  
 New York University  
 Birnbaum, Hyman, Assistant to  
 Principal

- Joan of Arc Jr. High School  
1950 Andrews Avenue
- Bock, Doris L., Instructor  
New York University  
1 Christopher Street
- Boros, Arnold L., Teacher, Mathematics  
396 East 170th Street
- Brumbaugh, Florence, Principal  
Hunter College Elementary School  
695 Park Avenue
- Burns, Susette, Principal  
949 West End Avenue  
Apartment 9-B
- Cameron, Sarah A., Principal  
Public School 46, Bronx  
279 East 196th Street
- Conrad, Edna G.  
8 Bank Street
- Craig, Gerald S., Professor of  
Natural Sciences  
Teachers College, Columbia University
- Crosby, Muriel, Associate Director  
Educational Research Service  
Silver Burdett Co.  
45 East 17th Street
- Cunningham, Ruth, Assistant Professor  
& Research Associate, Horace Mann-  
Lincoln Institute of School Experi-  
mentation, Teachers College, Colum-  
bia University
- Donohue, John J., Principal  
Public School 16, Bronx  
2219 Lyon Avenue
- Drummond, Laura W., Professor of  
Home Economics  
Teachers College, Columbia University
- Evans, Hubert M., Research Associate  
Teachers College, Columbia University
- Faddis, Gabrielle Joan, Director, After  
School Center  
Greenwich House  
27 Barrow Street
- Featherstone, W. B., Teachers College,  
Columbia University
- Femiani, Winifred, Supervisor  
Bureau CRMD  
224 East 28th Street
- Flaum, Harry  
21 West 86th Street
- Foshay, A. Wellesley  
509 West 121st Street
- French, Will, Professor of Education  
Teachers College, Columbia University
- Gates, Arthur I., Teachers College,  
Columbia University  
525 West 120th Street
- Giles, H. H., Bureau of Intracultural  
Education  
1697 Broadway, 14th Floor
- Goodson, Max R., Coordinator and  
Curriculum Instructor  
106 Morningside Drive
- Gould, Lyttleton B. P., Educational  
Relations Consultant  
141 East 53rd Street
- Gray, Dorothy, Assistant Professor of  
Education  
405 West 118th Street
- Hacker, Lillian L., Associate Curriculum  
and Teaching  
Teachers College, Columbia University
- Hamblen, Stewart B., Consultant  
1 University Place
- Hopkins, Johanna M.  
35-15 84th Street  
Jackson Heights
- Hopkins, L. Thomas, Teachers College,  
Columbia University
- Jackson, Florence J.  
88 Morningside Drive
- Jersild, Arthur T., Teachers College,  
Columbia University
- Kennedy, Mabel  
204 West 94th Street
- Lammel, Rose  
Box 120, Teachers College, Columbia  
University
- Lane, Howard A., New York University
- Lynch, Katherine D., Assistant Director  
BCRMD, New York City Schools  
224 East 28th Street
- Mackenzie, Gordon, Chairman  
Division of Curriculum and Teaching  
Teachers College, Columbia Uni-  
versity
- Mantell, Herman P., High School  
Teacher  
154 Nassau Street
- Marriner, R. D., American Book Com-  
pany  
88 Lexington Avenue
- May, Barbara  
2206 Valentine Avenue
- McDonnell, Eleanor T.  
141 East 88th Street
- McLaughlin, Samuel J., School of  
Education  
New York University
- McNally, Harold J., Teachers College  
Columbia University
- Meisel, Carl L., Teacher of Applied  
Physics  
161 West 75th Street
- Melby, Ernest O., Dean, School of  
Education  
New York University
- Miel, Alice, Assistant Professor of  
Education  
509 West 121st Street
- Myers, Alonzo, School of Education,  
New York University
- Nifenecker, Eugene A.  
800 Riverside Drive
- Platt, Clara Skiles, School of Education  
New York University  
19 W. 10th Street
- Power, Leonard, Independent Educa-  
tional Consultant  
2 West 45th Street
- Powers, S. Ralph, Teachers College,  
Columbia University
- Rice, Chandos Reid, Supervisor  
106 Morningside Drive
- Rice, Ted, School of Education  
New York University
- Robinson, John T.  
130 Morningside Drive Apt. 24
- Roden, Alice, Principal  
Public School 94, Bronx  
444 East 58th Street
- Rosecrance, F. C., New York University  
Rosenthal, Al  
3525 Perry Avenue
- Ryan, Francis A., Assistant Professor  
of Education (Fordham University)  
340 West 57th Street
- Scala, Rose E.  
5222 Broadway
- Shapiro, Leo, Educational Director  
119 West 57th Street
- Sharp, George M.  
509 West 122nd Street
- Sister Gilda Dal Corso, M.P.F.,  
314 East 110th Street
- Stolper, Muriel L.  
509 West 121st Street



- Storen, Helen, Division of Nursing  
 Education  
 Teachers College, Columbia University  
 Stratemeyer, Florence B., Professor of  
 Education  
 Teachers College, Columbia University  
 525 West 120th Street  
 Taba, Hilda  
 437 West 59th Street  
 Taylor, Bent, Director, Public Relations  
 Community Chests and Councils  
 155 East 44th Street  
 Thayer, V. T., Fieldston School, Field-  
 ston Road  
 Thompson, Mary A.  
 500 Riverside Drive  
 Tompkins, Charlotte C., National Staff  
 of Department of Christian Educa-  
 tion, Episcopal Church  
 281 Fourth Avenue  
 Van Ness, Carl, Editor, D. Appleton-  
 Century Company  
 35 West 32nd Street  
 Vitarelli, Wm. V., Teachers College,  
 Columbia University  
 Voss, Edna R., Secretary  
 Unit of Education and Medical Work  
 Board of National Missions of the  
 Presbyterian Church in the USA  
 156 Fifth Avenue  
 Wagner, Victoria, Principal  
 33 Central Park West  
 Welch, Earl E., Administrative Editor  
 Silver Burdett Company  
 45 East 17th Street  
 Whalen, Frank D., Assistant Superin-  
 tendent of Schools  
 330 East 152nd Street  
 Wiles, Kimball, New York University  
 School of Education, Washington  
 Square  
 Wilson, Howard, Carnegie Endowment  
 for International Peace  
 405 West 117th Street  
 Witt, Paul W. F., Associate in Cur-  
 riculum and Teaching  
 Teachers College, Columbia University  
 Niagara Falls  
 Abate, Harry F., Principal  
 Niagara Street School  
 Boughner, Lillian M.  
 1629 Eighth Street  
 North Rose  
 Marvin, Francis B.  
 North Syracuse  
 Jones, Blanche N.  
 101 Church Street  
 Shaver, Paul M.  
 North Troy  
 Graham, Mattie, Elementary Supervisor  
 Director of Remedial Reading  
 Oceanside  
 Barry, Winfred A., Elementary  
 Supervisor  
 Oceanside School No. 5  
 Ogdensburg  
 Roda, F. C., Superintendent of Schools  
 George Hall Junior High School  
 Olean  
 Nickles, George F., Elementary Principal  
 308a Laurel Avenue  
 Ricker, Mayme A.  
 117 North 4th Street  
 Oneida  
 Anderson, George  
 Kenwood Avenue  
 Onconta  
 Budd, George F., State Teachers College  
 Ersland, Iolita, Instructor  
 State Teachers College  
 Hobbie, Katherine E., Instructor in  
 Education  
 State Teachers College  
 Porter, Willis P., Principal  
 State Teachers College, Campus School  
 Onondaga  
 Osborn, Marton  
 Box #3  
 Ossining  
 Jennings, Charles W., Education Divi-  
 sion  
 Rand McNally and Company  
 79 South Highland Avenue  
 Oswego  
 Hoffman, Augusta M., Art Supervisor,  
 Public Schools  
 329 East Walnut Street  
 Metcalf, Leonard  
 44 East Utica Street  
 Mitchell, Helen P., Elementary  
 Supervisor  
 166 East 4th Street  
 McFee, Melvin A.  
 178 East Mohawk Street  
 Smith, Elliott D.  
 Oyster Bay  
 Blank, Helen R., Oyster Bay High  
 School  
 Palmyra  
 Green, Edward I., Palmyra High School  
 Penn Yan  
 Backus, Edna  
 309 Main Street  
 Henry, Theodore K.  
 235 Main Street, East  
 Plattsburg  
 Banks, Marie, Professor of Home  
 Economics  
 State Teachers College  
 Norton, Louise M., Director of Training  
 State Normal School  
 Rochester  
 Brooks, Lillian T.  
 13 Fitzhugh Street, South  
 Dick, Jeanette, Teacher, 3rd Grade  
 447 Thurston Road  
 Fisher, Carl  
 292 Brooklawn Drive  
 Haessig, Alma E., Principal School #44  
 219 Sawyer Street  
 Harris, Sabra T., Elementary Principal  
 School #30  
 36 Otis Street  
 Kenny, Margaret C.  
 284 Frost Avenue  
 Schefinger, Florence  
 343 Avenue B  
 Schwartz, Elizabeth, School #16  
 321 Post Avenue  
 Seyfried, Dorothy Anne  
 46 Culver Parkway  
 Shelmadine, Marguerite B., Viceprincipal  
 Jefferson High School  
 Edgerton Park  
 Updike, Floyd S., Principal  
 145 Midland Avenue  
 Voss, Dorothy  
 177 Buckland Avenue  
 Whittaker, Mrs. F., Principal, School  
 #13  
 81 Hickory Street  
 Rome  
 Baker, Adelaide Woodall  
 106 North George Street  
 Roxbury  
 Travis, Zena R., District Superintendent  
 of Schools

Schenectady  
Hageman, Genevieve A., Home Economics Supervisor  
108 Union Street

Scotia  
Hyners, Thomas K., Scotia Jr. High School

Seneca Falls  
Cooley, Frank A.  
20 Clinton Street

Sherburne  
Webb, Mildred C., Grade Superintendent

Sidney  
Pyle, Ralph F.  
10 Pleasant Street

Skaneateles  
Becker, Lu H.  
54 West Genesee Street

Suffern  
Cullen, James H., Suffern High School

Syracuse  
An-Chi, Lou, Student  
204 Marshall Street  
Austin, Mrs. George H., Graduate Student  
640 Cumberland Avenue  
Barnes, Georgia L., Head English Department  
Blodgett Vocational High School  
314 Rowland Street  
Blackmer, David Ned  
611 Comstock Avenue  
Bowen, Mary E., Supervisor of Health Teaching  
409 W. Genesee Street  
Bubbs, Frank S.  
B 1 U3 Slocum Heights  
East Colvin  
Dijkstra, John W.  
618 Ostrom Avenue  
Feltz, Frederick A.  
130 Clarke Street  
Ganders, H. S.  
911 Euclid Avenue  
Gehm, Robert C.  
210 Clifton Place  
Hahn, Richard J.  
411 Garfield Avenue  
Hall, Viola, Classroom Teacher  
233 West Borden Avenue  
Hick, Basil L.  
210 West Ostrander Avenue  
Howe, Harry H., University Trailer Camp  
22 Gibbons Street  
Kazacos, Nicholas J.  
118 Leonard Avenue  
Lindstrom, Gunnar  
13 Gibbons  
University Trailer Camp  
Macwana, Meshak, Student  
305 Waverly Avenue  
Marks, Veronica R.  
723 Irving Avenue  
Melchior, William T., Professor of Educational Supervision  
Syracuse University  
140 Westminster Avenue  
Munz, Marion Whalen  
Supervisor Vocal Music  
607 University Avenue  
Murray, Helen C.  
507 Dewitt Street  
Namani, Abdel Kader  
1015 Harrison Street  
Phelps, Margaret, Director of Instruction  
Intermediate Grades, Public Schools  
409 West Genesee Street

Platto, Elsie S., Elementary Principal  
423 North Wolcott Avenue  
Porter, Robert B., Jr.  
111 Ruhamah Avenue  
Praeger, Rosamond, Supervisor of Early Childhood and Parent Education  
Board of Education  
West Genesee Street #409  
Richmond, Walter E.  
221 McLennan Avenue  
Thomas, Lee E.  
113 Josephine Street  
White, Verna  
Syracuse University  
Tonawanda  
Ketcham, M. Kathleen  
Grade Supervisor  
South Clinton Street

Troy  
Hakes, Elton J., District Superintendent.  
District #1  
R. F. D. 3

Union Springs  
Gould, Elmer Robert

Utica  
Coriole, Adeline E., Elementary Teacher  
1636 St. Agnes Avenue  
Howard, Rosemary C.  
2145 Caroline Street  
Schmidt, Ralph N., Sr., Utica College  
of Syracuse University  
Oneida Square  
Valley Stream, L. I.  
Healy, Helen, Teacher  
22 Parkwood Drive East  
Vanhornsville  
Abbott, Phillipp J.  
Walton  
Culey, Marcel  
10 South Street  
Waterloo  
Contant, Allen E.  
108 East Elisha Street

Watertown  
Daly, Robert J., Director of Curriculum  
163 Bishop Street  
Selby, June, Supervisor  
Board of Education Office, City Hall

Weedsport  
Smith, Hebert B.

White Plains  
Prehm, Hazel, Director of Elementary Education  
616 County Office Building

## NORTH CAROLINA

Asheville  
Darden, Bertha M.  
1 Woodside Place

Chapel Hill  
Gwynn, J. Minor, Associate Professor of Education  
University of North Carolina  
McCuskey, Dorothy, Associate Professor of Education  
University of North Carolina  
Morrison, Roy W., Professor of Education  
Box 431

Charlotte  
Moore, B. D., Principal  
Isabella Wyche School

Clinton  
Lawrence, M. Ruth, Elementary Supervisor  
505 McKoy Street

Durham  
Brownell, W. A., Professor Educational Psychology  
Box B, College Station  
Elder, Alfonso, Director  
406 Formosa Avenue  
Michaels, Maltilda O., Elementary Supervisor  
2313 Club Boulevard  
Fayetteville  
Beck, Mae, Teacher, Central High School  
308 Green Street  
Williams, Mae R.  
209 Moore Street  
Gastonia  
Peedin, Minnie Lee, Elementary Supervisor  
403 South Chester Street  
Graham  
Dalton, Theo, Director of Instruction  
Alamance County Schools  
Greensboro  
Fitzgerald, Ruth, Professor of Education  
308 South Aycock Street  
Newman, Sallie B.  
Director, Elementary Education  
Box 419  
Greenville  
Practor, Reba  
Box 18  
Kannapolis  
Hunt, Lucille  
201 East First Street  
Lexington  
Pitts, Mauric Simpson, Supervisor,  
Davidson County Elementary Schools  
Box #6  
Lincolnton  
Hein, Katherine, Principal  
Lincolnton Grammar School  
New Bern  
Anthony, Mary, Supervisor  
Box 1136  
Mann, Clara D., Supervisor, County Schools  
P. O. Box 6  
Raleigh  
Lacy, Frances, Elementary Supervisor  
Raleigh Public Schools  
Board of Education  
Underwood, Myrtle, Principal  
Hayes-Barton School  
1200 Glenwood Avenue  
Wetherington, Julia, Division, Instructional Service  
State Department of Public Instruction  
Roanoke Rapids  
Hearne, Clara, Elementary Supervisor  
Box 68  
Rocky Mount  
Edwards, Charles T., Principal  
312 East Highland Avenue  
Pope, O. R., Supervising Principal  
Booker T. Washington High School  
606 Atlantic Avenue  
Tarboro  
McNairy, Julia, Supervisor  
County Board of Education  
Edgecombe County  
Washington  
Lancaster, Cora  
Wilkesboro  
Edelin, J. B., Principal  
Lincoln Heights High School  
Wilmington  
Washington, B. T., Principal  
Williston Primary School

Winston-Salem  
Butler, Myrtle B., Supervisor  
West End School  
Siewers, Grace L., Librarian  
Salem College Library

## NORTH DAKOTA

Dickinson  
Grindstuen, Iver L., Supervisor,  
Secondary Teaching  
State Teachers College  
Smith, Emerson H.  
c/o H. J. Eininger  
Grand Forks  
Selke, Erich, Teacher Education  
1710 University Avenue  
Mayville  
Barnes, James A., Director of Elementary Training  
State Teachers College  
Minot  
Ewen, Leila C., Teachers College  
Valley City  
Kraig, Paul G., Director of Rural Training  
State Teachers College  
Martinson, Esther C., Supervisor, State Teachers College

## OHIO

Akron  
Dillehay, A. J., Executive Director  
Curriculum and Instructor  
70 North Broadway  
Callow, Harriet T.  
48 South Valley Street  
Distad, H. W., Professor of Education  
636 Glendora Avenue  
McConnell, Lucille F., Primary Teacher  
887 Greenwood Avenue  
Weber, Fred C., Assistant Principal  
John H. Buchtel High School  
Alliance  
Humphreys, Phila, Assistant Professor  
in charge Elementary Education  
Mount Union College  
Ray, Henry W., Director, Elementary Schools  
Athens  
Elliott, Irene, Supervisor  
77 West State Street  
Bowling Green  
Wagner, William S., Director of Curriculum  
Bowling Green Public Schools  
Canton  
Fisher, Dorothy L., Principal Elementary  
802 Park Avenue S. W.  
Fowler, Lena M.  
1332 Logan N. W.  
Gillmore, M. E., Supervising Principal,  
Wells School  
1422 25th Street N. W.  
Hyatt, Eulalia C., Director of Special Education  
1936 North Market Avenue  
Cincinnati  
Beery, Althea, Supervisor of Language Arts  
315 Terrace Avenue  
Bennett, O. H.  
532 Court House  
Bertermann, Helen A., Assistant Principal  
1339 Cryer Avenue

- Bradley, Helen, Principal, Guilford School  
2401 Salutario Avenue
- Deans, Edwina, Instructor in Education  
274 Senator Place
- Guilfoile, Elizabeth, Principal  
12th District School
- Hasemeier, Margaret E., Principal, Peaslee School  
Woodward Street near Main
- Hargitt, Ruth A., Special Education  
11 Glenmary Avenue
- Kirby, Theresa K.  
532 County Court House
- McKim, Margaret, Teachers College, University of Cincinnati
- Ragland, Fannie J., Director, Upper Elementary Grades  
216 East Ninth Street
- Shockley, Charlotte, Librarian  
Professional Library, Board of Education  
216 East 9th Street
- Sister Marie Emilie, S.N.D. De N. Mt. Notre Dame, Convent Hill  
Box 7-E, R. F. D. 6
- Sternberg, Thurza, R., Assistant Principal  
408 Ludlow Avenue
- Tracy, Kathleen, Elementary Principal  
532 Howell
- Unzicker, Cecilia E., Supervisor of Language Arts  
Cincinnati Public Schools  
216 East Ninth Street
- Warnking, May, Principal  
4792 Rapid Run Road  
Cleveland
- Adell, James C., Director, Division of Educational Research  
Board of Education, 1380 E. 6th St.
- Gilbert, Lee R.  
1520 Chardon Road
- Harry, David P., Jr., Professor  
Graduate School  
Western Reserve University
- Metts, D. E., Principal  
310 East 216th Street
- Ritchie, Harry E., Assistant Superintendent, Curriculum Development  
Board of Education
- Simpson, W. Fletcher, Principal  
Shaker Heights Jr. High School  
South Woodland and Woodbury Roads
- Sister M. Patricia, Regional Supervisor  
1418 West 114th Street  
Cleveland Heights
- Davidson, S. W., Director of Curriculum, Board of Education  
1749 Lee Road
- Columbus
- Albert, Harold, Professor of Education, Ohio State University  
1982 Berkshire Rd.
- Allen, Amy A., Supervisor  
231 West 10th Avenue
- Bancroft, Clara M., Assistant Professor, Home Economics Education  
Ohio State University
- Bloomer, Lillian M.  
84 East Como Avenue
- Bloser, R. E., President  
Zoner-Bloser Co.  
P. O. Box 4006—Station 11
- Burr, James B., Arps Hall, Ohio State College of Education
- Cottrell, Donald P., Dean, College of Education  
Ohio State University
- Crist, Anita M., Teacher  
1301 North Oakland
- Frahm, Olive M., Principal  
362 Piedmont Road
- Hanna, Geneva, Assistant Professor  
University School, Ohio State University
- Jacobs, Leland B., Assistant Professor  
1803 Gerrard
- Johnson, Eleanor  
Library, 400 South Front Street
- Klohr, Paul R.  
115 W. 10th Avenue
- Lange, Lorraine  
Room 117, Arps Hall, Ohio State University
- Laughlin, Hugh D., Coordinator of Instruction  
University School  
Ohio State University
- Leum, Clara L., Professor of Education  
Capital University  
886 South Roosevelt
- Mitchell, Letty, Associate Professor  
322 - 18th Avenue
- Orr, Jeanne E., Instructor  
Related Arts, University School  
Ohio State University
- Ramseyer, John A., Acting Director  
University School,  
Ohio State University
- Royer, Mary  
c/o Mrs. J. I. Clifton  
207 - 15th Avenue
- Schmidt, Mildred, Language, Arts  
University School,  
Ohio State University
- Scott, Dorothy D., Ohio State University
- Streitz, Ruth  
117 Arps Hall, Ohio State University
- Walters, Verna Fogg, State Supervisor,  
Elementary Curriculum  
State Department of Education
- Zirbes, Laura, Professor of Education  
1567 Perry Street
- Conneaut
- Purdy, Ralph D.  
819 Main Street
- Dayton
- Boda, H. L., Assistant Superintendent in charge of Curriculum  
232 North Main Street
- Findlay
- Daily, Myrtle, Elementary Supervisor  
Office, Senior High School
- Hamilton
- Henes, Edna, Elementary Principal  
647 Franklin Street
- Harrisville
- Roche, Emily, Consultant, Lyons and Carnahan  
P. O. Box 123
- Kent
- Heer, A. L., Director of Teacher Training  
312 South Willow Street, Box 366
- Rees, Janet C., Assistant Professor of Education  
Kent State University
- Lakewood
- Howard, Ethel K.  
1470 Warren Road
- Lockland
- Monroe, Margaret E.  
262 North Cooper Avenue



- Lorain**  
 Beckwith, Erma J., Elementary Supervisor  
 Lorain Public Schools  
 Gleason, Emma M., Assistant Superintendent, Lorain County Schools  
 R. F. D. 2
- Maumee**  
 Eibling, Harold H., Superintendent  
 419 East John Street  
 Scott, Clyde R., Superintendent and Principal
- Neward**  
 Holler, Ada J., Elementary Supervisor  
 1223 Cherry Valley Road
- New Concord**  
 Bixler, Lorin E., Professor of Education, Muskingum College
- Oxford**  
 Edmiston, R. W., Professor of Education  
 117 West Walnut Street  
 Gilham, Helen L., Critic Teacher  
 Miami University  
 120 S. Beech Street  
 Griffith, Ruth Margaret, Director, Extra Mural Teacher Training  
 Miami University  
 Neprud, Buelah, Instructor  
 117 East Collins  
 Silliman, Georgina, Instructor of Education  
 22 East Collins  
 Tanruther, E. M., Director, Division of Elementary Education  
 Miami University  
 Willockson, Mary, Associate Professor of Education  
 Miami University Elementary Schools  
 Campus Gate #8
- Poland**  
 Harding, Dorothy, Elementary Supervisor  
 50 College Street
- Portsmouth**  
 Wahlstrom, Ebba, Early Elementary Consultant  
 2140 Tinline Hill
- Reading**  
 Sister Mary St. Agatha, Diocesan Supervisor  
 Mount Notre Dame Academy
- Rock Creek**  
 Spafford, Ivol, Curriculum Consultant
- Sidney**  
 Yates, Leah, Elementary Supervisor  
 Shelby County Schools
- Springfield**  
 Nystrom, W. C., Director of Teacher Training  
 Wittenberg College
- Struthers**  
 Ruffer, Argra  
 24 Overlook Boulevard
- Toledo**  
 Brown, Francis W., Superintendent  
 Ottawa Hills Schools  
 Burwick, Charlotte D., DeVilbis High School  
 Upton Avenue  
 Dunsmore, Philo C., Supervisor, Social Study and Curriculum  
 Board of Education Building  
 121 Southard  
 Oechsler, Hazel, Principal  
 Nathan-Hale School  
 Shenandoah and Foster Avenue
- Pasch, Dorothy F., Supervisor, Special Education  
 Toledo Board of Education  
 121 Southard Avenue  
 Benigna, Sister M. O.S.U. Supervisor, Elementary School  
 Ursuline Convent  
 2413 Collingwood Boulevard  
 Zierleyn, Katherine  
 Teacher, Chairman of Curriculum  
 2289 Upton Avenue  
 Washington Court House  
 Teeters, Ruth C., Teacher  
 531 Columbus Avenue
- Westerville**  
 Clark, Jean Fraser, Associate Professor of Elementary Education  
 Otterbein College  
 Frazier, Dorothy M.  
 10484 North State Road
- Wooster**  
 Stauffer, Margaret, Principal, Elementary School  
 923 Beall Avenue
- Youngstown**  
 Burke, Gladys, Teacher  
 244 Outlook Avenue  
 Fleming, Robert L., Principal  
 South High School  
 Haddow, Mary A.  
 Director, Elementary Curriculum  
 Board of Education  
 Wilcox, George M., Dean  
 Youngstown College
- Zanesville**  
 Brenell, Lillian, Elementary Supervisor  
 1005 Greenwood Avenue

## OKLAHOMA

- Ada**  
 Morrison, Ben L., Director of Rural Education  
 East Central State College  
 611 South Center
- Alva**  
 Bilby, Afton, Supervisor  
 Northwestern College  
 629 Church Street  
 Lyday, Mattie, Primary Supervisor  
 717 Center Street  
 Stout, John B., Director of Training  
 Northwestern State College
- Ardmore**  
 McGoodwin, Irene Pate, Supervisor, Elementary Education  
 Ardmore City Schools
- Bristow**  
 Nichols, B. R., Superintendent  
 Bristow Public Schools  
 Smith, Ida T., Director of Instruction  
 Box 42, Bristow High School
- Chickasha**  
 Russell, Mary  
 Box 263, Oklahoma College for Women
- Durant**  
 Fort, M. K., Southeastern State College
- Edmond**  
 Coyner, Anna S., Business Teacher  
 Box 148  
 Stayton, Winifred, Supervisor, Teacher Training  
 Central State Teachers College  
 224 East 4th Street  
 Wiens, Esther, Teacher  
 320 East Hurd

- Enid  
Manahan, Ethel H., Professor of Education  
Box 2275, University Station
- Hugo  
Steel, Hazel B.  
811 West Jackson
- Langston  
Hughes, J. H., Dean of Men  
Langston University  
Martin, William H., Director, Division of Education  
Langston University
- Muskogee  
Harris, Claude, Director of Elementary Education  
201 North 15th Street  
Curry, Guy, Principal  
Alice Robertson Jr. High School
- Norman  
Bender, John F., University of Oklahoma  
Caldwell, Charles L., Assistant Professor, Secondary Education  
Faculty Exchange, University of Oklahoma  
Elder, Ruth E., Faculty Exchange, University of Oklahoma  
Holstine, Garold D.  
1401 South Jenkins  
Huddleston, Lonnie D., Instructor  
R. F. D. 2  
Ragan, W. B., Teacher Training  
College of Education, Oklahoma University  
Rinsland, Martha  
434 Keith Street  
Ruggles, Allen M., Professor of Educational Psychology  
University of Oklahoma  
Waid, Guy, Principal  
North Campus, Oklahoma University
- Okemah  
Jackson, Mrs. Clyde, Elementary Principal  
c/o Stephenson-Jackson Motor Company  
6th and Broadway
- Oklahoma City  
Birkhead, Nina, Elementary Principal  
6629 South Walker, R. F. D. 7  
Brittson, Ann  
1831 N. W. 10th Street  
Brown, R. Ben  
1024 Northwest 14th  
Brunner, H. B.  
400 North Walnut Avenue  
Chadwick, Grace, Coordinator of Art  
Oklahoma City Schools  
Clark, Vivian M., 1st Grade Teacher  
1531 N. W. 31st Street  
Greer, Lola B., Primary Teacher  
1201 N.E. 8th Street  
Haynes, Vivien V., Coordinator, Early Childhood Education  
400 North Walnut  
Harris, Edgar E., Supervisor of Curriculum  
State Department of Education  
State Capitol  
Kelly, Anna K., Elementary Principal  
2001 N. W. 13th Street  
Kingston, Myra Shaw, Elementary Principal  
2543 N. W. 16th Street  
Liebhart, Ethel M., Elementary Principal  
1809 N. Cross  
Mashburn, Fay, Teacher  
5309 MacArthur Boulevard
- McCord, Mary  
2015 N W 20th Street
- McCoy, Lucile  
521 N. W. 13th Street
- Moon, F. D.  
1314 N. E. 8th Street
- Mullinax, H., Supervisor and Elementary Principal  
2544 Cashion Place
- Powers, J. L.  
1032 Neil
- Quinn, Lila  
817 S. W. 36th Street
- Reid, Ellen, Instructor, Primary Grades  
2204 N. W. 25th Street
- Richter, Inez  
521 N. W. 13th Street
- Robinson, Gilbert  
1808 North Drexel
- Rogers, Georgia  
2638 N. W. 13th Street
- Ryden, George H., Assistant Professor  
Oklahoma City University
- Scales, Pearl, Director, Elementary Schools  
3408 Northwest 19th Street
- Smart, Jake, Director of Curriculum  
State Department of Education  
State Capitol Building
- Smith, Levia Meyers  
3408 N. W. 26th Street
- Thomas, Alta, Elementary Principal  
630 1/2 N. W. 18th Street
- Thomas, Frances C., Elementary Principal  
630 N. W. 18th Street
- Okmulgee  
Chambers, W. Max, Superintendent  
Okmulgee City Schools  
Watts, Winifred, Coordinator of Elementary Grades  
Junior College Building
- Pawhuska  
Layton, Edith M.
- Ponca City  
Hadsell, John D.,  
Ponca Military Academy  
Melton, Cleo, Elementary Supervisor  
201 South 5th Street
- Poteau  
Costner, Elbert L.
- Sapulpa  
Drewry, Agnes M., Director of Elementary Education  
Sapulpa City Schools
- Stillwater  
Chapman, Joanna, Teacher Trainer  
Oklahoma Women's College  
Hampel, Margaret, A & M College of Education  
Lackey, Guy A., Associate Professor  
Oklahoma A & M College  
McIntosh, D. C., Dean, Graduate School  
Oklahoma A & M College  
17 College Circle
- Tulsa  
Black, M. M., Central High School  
Griggs, O. C., Assistant Superintendent  
Public Schools  
410 South Cincinnati  
Hooper, George J., Principal, Bryant School  
Board of Education Building  
Hudson, Jess S., Director of Curriculum  
Board of Education  
410 South Cincinnati  
Jones, Helen M.  
216 East 19th Street

McClenaghan, Mary, Primary Superintendent  
416 West 6th Street  
Pauly, Frank R., Director of Research  
Tulsa Public Schools  
Setzepfandt, A O H, Principal  
1547 South Delaware Place  
Sheehan, Rosemary, Woodrow Wilson Jr.  
High School  
Shepherd, Byron L.  
1219 South Louisville

## OREGON

Albany  
McCormack, R. E., City School Superintendent  
420 East 3rd Street  
Corvallis  
Bolt, Elsie, Elementary Supervisor  
Corvallis City School  
DuBois, May, Oregon State College  
Eugene  
Doty, Opal, Elementary Supervisor  
County Courthouse  
Williams, Mildred, University High School  
University of Oregon  
Grants Pass  
Dallas, Neva, County Supervisor  
Route R. F. D. 3, Box 888  
Hillsboro  
Withycombe, Florence, Elementary Supervisor  
County Courthouse  
Hood River  
Smith, Kathryn, County Supervisor  
P. O. Box 282  
Independence  
Donaldson, Mary A., Supervising Teacher  
1055 Monmouth Street  
McAnear, A. D.  
Monmouth  
Bonnichsen, Esther, State Teachers College  
Henkle, Emma, Associate Professor of Education  
Department of Education  
Oregon College of Education  
Rader, Elizabeth, Winegar Apartments  
Wolfer, Henrietta R., Principal  
Monmouth Training School  
Oregon College of Education  
Portland  
Caughlan, J. C.  
530 West Cheltenham Street  
Crum, Winona  
5847 N. E. 27th Avenue  
Ellinger, Bertha A., Supervisor of Indian Education  
Building 34, Swan Island  
Ernst, Karl D., Assistant Professor of Education  
631 N. E. Clackamas Street  
Fenn, Lucile E., Director, Elementary Education  
Administration Building, 631 N. E. Clackamas Street  
Forest, Ruth M., Supervisor, Family Life Education  
631 N. E. Clackamas Street  
Hoel, Lesta, Supervisor of Mathematics  
631 N. E. Clackamas Street  
Jenne, Eldon L., Supervisor  
631 N. E. Clackamas Street  
Peterson, Hilma J.  
2508 N. E. Everett

Posey, C. W.  
3334 N. E. 45th Street  
Ramage, Evelyn G.  
2284 N. E. Everett  
Smith, John E.  
5740 N. Williams Avenue  
Tucker, E. Bernice  
605 Court House  
Wills, Olin  
3659 S. E. Carlton  
Wolf, Ray O., Supervisor  
4035 N. E. 70th Avenue  
Zollinger, Marian  
631 N. E. Clackamas Street

Salem  
Anderson, Robert E., State Department  
950 North 15th Street  
Aschenbrenner, Carl E., Principal  
Parrish Jr. High School  
Beardsley, Florence E., State Supervisor, Elementary Education  
State Department of Education  
Hills, Joy, Principal  
Leslie Jr. High School  
Hoenig, Vivian S.  
1475 South Commercial  
Johnson, Harry B., Curriculum Director  
Salem Public Schools  
460 North High Street  
Stephens, Eleanor, Librarian  
Oregon State Library  
Weddle, Carmalite I., Supervisor  
1365 Broadway  
Tigard  
Hassell, Errol, Superintendent  
Tigard Public Schools

## PENNSYLVANIA

Allentown  
Bechtel, Laura, Allentown School District  
31 South Pennsylvania Street  
Lilly, Mabel H., Elementary Principal  
Franklin School, 14th and Oak Streets  
Altoona  
Cockerille, Clara E., Supervisor of Elementary Schools, Lincoln Building  
Hynick, Kathryn N.  
322 East Grant Avenue  
McCormick, Ethel, Lincoln School  
Bethlehem  
Barthold, Harold J., Elementary Principal  
1024 North New Street  
Frankenfield, Ira M., Elementary Principal  
637 Center Street  
Hedge, John W., Superintendent  
Broughal Building  
125 West Packer Avenue  
Biglerville  
Stock, L. V., Board of Education  
Bradford  
Sprague, Stella H., Director Secondary Education  
53 Elm Street  
Bristol  
Snyder, Warren P., Superintendent of Schools  
Bristol High School  
Wilson Avenue at Garfield Street  
California  
Gilland, Thomas M., Director of Student Teaching  
State Teachers College  
Chester  
Geary, Catherine E., Director of Elementary Education and Curriculum  
9th and Crosby Streets

- Conshohocken  
 Landis, Robert C., Superintendent of  
 Schools  
 Doylestown  
 Boehm, Charles, Superintendent Bucks  
 County  
 75 North Main Street  
 Drexel Hill  
 Kirk, S. Elisabeth, Elementary Principal  
 Garrettford School  
 McMaster, Thomas W.  
 318 Maple Avenue  
 DuBois  
 Brewer, Karl M., Superintendent of  
 Schools  
 133 East Washington Avenue  
 Easton  
 Cole, John S., Supervising Principal  
 School District of Palmer Township  
 Northampton County  
 Garner, Harry F., Instructor in Educa-  
 tion  
 466 Northampton Street  
 Erie  
 Booth, Miriam B., Supervisor of Second-  
 ary English  
 640 West 9th Street  
 Preston, Joseph S.  
 240 Shenley Drive  
 Zechiel, Allen N., Eric Day School  
 Farrell  
 Grimes, Helen K., Mathematics  
 Coordinator  
 Box 414  
 Harrisburg  
 Cressman, Paul L., Director  
 Bureau of Instruction, Department of  
 Public Instruction  
 Powers, Leversia L., Chief, Elementary  
 Education, State Department of Pub-  
 lic Instruction, Room 341, Educa-  
 tion Building  
 Stevens, A. Miriam, Elementary  
 Principal  
 222 Reily Street  
 Hazleton  
 Hinkle, Thomas L., Superintendent of  
 Schools, Green Street Administration  
 Office  
 Lamont, Bruce F., Principal  
 Senior High School  
 Indiana  
 Rhodes, Opal T., Director of Department  
 of Home Economics  
 State Teachers College  
 Jenkintown  
 Carson, J. O., Director of Curriculum  
 360 Walnut Street  
 Kutztown  
 Dimmick, R. W., Dean of Men  
 State Teachers College  
 Raker, William W., Director  
 Laboratory School  
 State Teachers College  
 Lancaster  
 Sinsenis, E. Susan, Principal  
 Nathan C. Schaeffer School  
 875 Pleasure Road  
 Smithgall, Elizabeth  
 126 North Lime Street  
 Lewisburg  
 Sauvain, Walter H., Associate Professor  
 of Education, Bucknell University  
 1413 West Market Street  
 Lewistown  
 Erdly, C. V., Superintendent  
 Public Schools  
 Lock Haven  
 Patterson, Allen D., State Teachers  
 College  
 Media  
 Laws, Catherine B., Elementary Super-  
 vising Principal  
 19 West 4th Street  
 Millersville  
 Thompson, Ethel, Supervisor  
 State Teachers College  
 Moylan  
 Everett, Samuel, Director of  
 Junior Red Cross  
 41 Shady Hill Road  
 Neffsville  
 Nitrauer, W. E., Supervising Principal  
 Manheim Township High School  
 New Bloomfield  
 Heine, Eugene, Director of Instruction  
 Carson Long Institute  
 Newton Square  
 Look, Arnold Everett, President  
 Ellis College  
 Northumberland  
 Kerstetter, Newton, Supervisor  
 253 King Street  
 North Wales  
 Shellenberger, William B., Supervising  
 Principal, North Wales High School  
 Oley  
 Geiss, Newton W., County Superin-  
 tendent  
 Berks Schools  
 Palmerton  
 Andreas, Thelma, Elementary Supervisor  
 240 Columbia Avenue  
 Philadelphia  
 Berman, Samuel, Principal  
 Thomas Fitzsimons Junior High School  
 26th and Cumberland  
 Bowers, Frances L., Elementary  
 Principal  
 65th Avenue and Limekiln Pike  
 Carback, Clarence H., Principal  
 Theo. Roosevelt Junior High School  
 East Washington Lane and Mus-  
 grave Street  
 Cline, William M., Principal  
 Overbrook High School  
 Coleman, Mary E., Assistant Professor  
 3810 Walnut Street  
 Crawford, Dorothy E., Assistant  
 Curriculum Office, Board of Public  
 Education, Parkway at 21st Street  
 Cushman, C. L., Curriculum Office  
 Room 206, Board of Education  
 Administration Building  
 Parkway at 21st Street  
 Dawes, Dorothy D.  
 4840 Pine Street  
 Dickter, M. Richard  
 2313 76th Avenue  
 Dillon, Ruth L.  
 3821 North Gratz Street  
 Evans, Walter P., Principal  
 Hopkinson Schools  
 L and Luzerne Streets  
 Foster, Helen W.  
 6913 Sprague Street  
 Greenberg, Rabbi Simon, Associate  
 Professor of Education  
 2253 North 53rd Street  
 Grizzell, E. D., Professor of Secondary  
 Education  
 Eisenhohr Hall  
 3812 Walnut Street  
 University of Pennsylvania



- Hanna, Edith B., Principal  
Vare Junior High School  
24th and Snyder Avenue
- Hay, Charles K., John M. Patterson  
School  
70th Street & Buist Avenue
- Henderson, Kenneth B., Assistant  
Professor  
3812 Walnut Street
- Hoffman, M. David, Head, English  
Department  
Simon Gratz High School  
17th and Luzerne Streets
- Honor, Leo L.  
7151 N. Uber Street
- Hood, Helen V., Principal  
Delaplaine McDaniel Public School  
22nd and Moore Streets
- Jones, Arthur J., Professor of Education  
School of Education  
University of Pennsylvania
- Kralovec, Dalibor William  
3526 Ella Street
- Kurtz, Virginia  
4211 Tyson Street
- Lang, Leon S., Religion Educator  
6235 Washington Avenue
- Lembke, Glenn L., Editor-in-chief  
The John C. Winston Company  
1010 Arch Street
- Liveright, Alice K., Principal  
Elementary School  
1512 Spruce Street
- Longshore, Marie K., Principal  
Kensington High School
- Melchoir, Montford, Girard College,  
Room 211  
High School
- Milliette, Earl B., Director  
Division of Fine and Industrial Arts  
Board of Education  
21st and Parkway Streets
- Newman, Raymond S.  
629 East Mt. Airy Avenue
- Noar, Gertrude, Principal  
935 North 65th Street
- Ralston, Alene, Psychology Consultant  
709 Church Lane
- Rannells, Emilie, Bureau of Pupil  
Personnel and Counseling  
Administration Building  
The Parkway at 21st Street
- Seegers, J. Conrad, Teachers College  
Broad and Montgomery Avenue
- Sharlip, Lou N., Elementary School  
Principal  
5058 North 8th Street
- Stack, Katherine, Principal  
Junior High School  
4733 Cedar Avenue
- Stonehill, David L., Principal  
Pinletter School  
Front and Godfrey Avenues
- Taulane, John B., Assistant to the As-  
sociate Superintendent of Public  
Schools  
1028 East Rittenhouse Street  
Germantown
- Webb, Ella, Principal  
A Wilson School  
46th Street and Woodland Avenue
- Wright, Anne, Elementary School  
Principal  
Ridge Avenue and Kales Street
- Phoenixville  
Hoffman, Jane, Supervisor of Elemen-  
tary Grades  
Phoenixville School District
- Pittsburgh  
Beatty, Evelyn, Principal, Crescent  
School  
Bennett & Tokay Streets
- Giltentboth, Ruth M., Supervisor  
819 Heberton Avenue
- Graf, Elizabeth, Elementary Supervisor  
232 Ralph Avenue
- Ingram, Evan W.  
Administration Building  
Bellefield Avenue & Forbes Street
- Lantz, W. W., County Superintendent  
345 County Office Building
- Lilley, Maude E., Primary Supervisor  
4403 Centre Avenue
- McKee, Margaret, Assistant County  
Superintendent  
345 County Office Building
- Olander, Herbert T., Assistant Pro-  
fessor, School of Education  
The University of Pittsburgh
- Park, Flora C., Supervisor  
7108 Edgerton Avenue
- Quigley, Rev. Thomas J., Superintendent  
of Catholic Schools  
11 Tunnel Street
- Sister Mary Jerome, Principal  
St. Josephat School  
2304 Mission Street
- Sones, W. W. D., School of Education  
University of Pittsburgh
- Plains  
Burns, Joseph J.  
1 Prospect Hill
- Reading  
Angstadt, Sylvia J.  
502 Friendensburg Road
- Bright, Catharine A., Kindergarten  
Primary Supervisor  
622 N. Second Street
- Deck, Clara M., Head,  
Department of Social Studies  
1409 North 13th Street
- Robesonia  
Moll, Richard M., Assistant County  
Superintendent  
313 West Penn Street
- Scranton  
Hail, Paul  
515 Mulberry Street
- Shillington  
Hemmig, Charles J.  
130 E. Lancaster Avenue
- Slippery Rock  
Houk, Dale W., President  
State Teachers College
- State College  
Amberson, Jean D., Professor of  
Home Economics Education  
Pennsylvania State College
- Cook, Ruth H., Assistant Professor  
Home Economics Education  
Pennsylvania State College
- Ekstrom, Doris E., Associate Professor  
306 East Foster Avenue
- Henderson, Grace M., Director of Home  
Economics  
Pennsylvania State College
- Moyer, James H., Assistant Professor  
Pennsylvania State College
- Taylor, Florence E., Director of  
Elementary Education  
Pennsylvania State College  
205 E. Beaver Avenue
- Trabue, M. R., Dean, School of Educa-  
tion  
Pennsylvania State College

# LIST OF MEMBERS

205

- Crows, Frank H.  
718 Maple St.  
Phillips, Edith Doster, Craft Consultant  
345 Palmetto Street
- SOUTH DAKOTA**
- Abdeen  
Armstrong, Genevieve, County Superintendent  
Huron  
Gilbert, Alice, Elementary Supervisor  
Huron City Schools  
Orla  
Bull, John Bad Heart, Teacher  
U. S. Indian Service  
Pierre  
Schafer, Lillian H., State Supervisor  
of Elementary Education  
Department of Public Instruction  
Rapid City  
Cunningms, Mable E., Grade Supervisor  
Sioux Falls  
Kise Publishing, Apt. 1  
Director of  
Hartshorn, Herbert E.,  
Curriculum  
Sioux Falls Public Schools  
109 Washington High Schools  
Spears, Frances C., Supervisor, Box 95  
Vermillion  
Noteboom, Charlotte M., Associate Pro-  
fessor of Education  
University of South Dakota  
Risk, Thomas M., Professor of Educa-  
tion & Director Teacher Training  
University of South Dakota
- TENNESSEE**
- Alamo  
Carter, Nela, Supervising Teacher  
Crockett County  
Albion  
Bacon, Mrs. Reba B., Superintendent  
306 Dixon Avenue  
Groves, Nellie G.  
Elementary Teacher  
Forest Avenue  
McMillan, Mayme J., Elementary  
Supervisor  
207 W. Washington  
Belle Buckle  
Dye, Nechie, Supervisor  
Bedford County  
Bohler  
Dixon, Mrs. Oma G., Supervisor  
207 S. Water Street  
Silver, Noel  
Brentwood  
Jones, Mary Sneed, Intermediate Super-  
visor, R. F. D. 1  
Brownsville  
Powell, Minnie McKee, Elementary  
Supervisor  
Camden  
Lockhart, Mrs. Wily C., Elementary  
Supervisor  
P. O. Box 218  
Celina  
Arms, Gettude, Elementary Supervisor  
Clay County Schools  
Charlotte  
Sensing, Mary Alice, Dickson County  
Board of Education  
Chattanooga  
Carpenter, Anne Leah, Assistant Super-  
intendent Elementary Education  
Court House
- Johnson, Eula, Supervisor Elementary  
Schools  
Department of Education  
Court House  
Mackinlay, Mary, Primary Supervisor  
330 Baldwin Street  
McCaferry, Ruth R.  
4208 Anderson Avenue  
McNulty, Susie, Supervisor of Element-  
ary Education  
Chattanooga Public Schools  
Clarksville  
Hayes, Elsie, Elementary Supervisor,  
Moore, C. H., Superintendent of City  
Schools  
Cleveland  
Trentham, Mrs. F. G., Supervisor of  
City Schools  
Clinton  
Hill, Lucille, Supervisor of Elementary  
Schools  
Anderson County  
Columbia  
Stoan, Marjorie M.  
Box 468  
Cooksville  
Hunter, Vallie, Elementary Supervisor  
Department of Education  
Covington  
Flowers, Dorothy, Supervising Teacher  
Decaturville  
Stevens, Allie Mae  
Dover  
Belts, Mary Florence, Elementary  
Supervisor  
Dyersburg  
Pope, Margaret, Visiting Teacher  
Elizabethton  
Dyer County Schools  
Bramitt, Pauline, Supervisor  
Carter County Schools  
Fayetteville  
McAfee, Marian, Supervising Teacher  
Lincoln County  
Gallatin  
England, Mrs. R. L., Jr., Elementary  
Supervisor  
Sumner County  
104 Foster Street  
Granville  
Moore, Donald, Supervisor  
Hampton  
Horton, Rose, Elementary Supervisor  
Hohenwald  
Bell, Hazell, Supervisor  
Lewis County, Box 103  
Jackson  
Cawthon, Hilda Robbs, Elementary  
Supervisor  
Court House  
Stinson, Ruth, District Supervisor  
Vocational Home Economics  
103 1/2 South Market  
Jasper  
Kelley, Audley, Supervisor of  
Elementary Schools  
Johnson City  
Farrell, Emma, Box 97  
East Tennessee State College  
Hyden, Gretchen, Associate Supervi-  
sor  
East Tennessee State Teachers College  
Kinsport  
Arnold, Earl A., Director of Instruction  
c/o Kinsport City Schools  
Knoxville  
Anderson, Roy R., Director of Element-  
ary Education  
624 Lamar Street

- Upper Darby  
Lukens, Mary L., Senior High School  
Lansdown Avenue & School Lane  
Koff, Pauline E., Senior High School  
Lansdown Avenue & School Lane  
Souder, Edith M., Principal  
Highland Park School  
Warren  
Whipple, Carl E., Assistant Superintendent  
Wayne  
28 Franklin Street  
Rowland, Sydney V., Superintendent of Schools  
Strickland, Helen L., Principal  
App. G-1, Windermere Court Apart-ments  
Wenersville  
Stoltz, John B., Elementary Principal  
Edison Street  
West Reading  
Stratton, J. Maurice, Supervising Principal  
4th Avenue and Franklin  
Westford  
Schaffer, Anna M., Principal  
McCandless Township Schools  
R. F. D. 2  
Wilkes-Barre  
Borromeo, Sister Mary  
161 S. Washington Street  
Williamsport  
Clapp, Florence E., Elementary Supervisor  
412 Louisa Street  
McConnell, Clarence H., Assistant Superintendent  
Lycoming County Schools  
Court House  
Greentown, Lambert  
Box 227  
RHODE ISLAND  
Kinston  
Cockrell, Dura Louise, Rhode Island State College  
Hoye, Monica, Elementary Supervisor  
262 Gano Street  
Moosehnan, Catherine E., Elementary Supervisor  
Warren  
134 Hope Street  
Quirk, Mary V., Principal & State Critic  
15 Wheaton Street  
Woomsocket  
Mother S. Pie R J M, Principal  
St. Clare High School  
61 Park Avenue  
ANDERSON  
Hawthorne, Mark F., Superintendent  
Bradley  
Pounds, Claudia, Teacher Helper  
Department of Education  
Evans, Ethel M., Primary Supervisor  
60 Church Street  
Chester  
Lawson, Edna H., Office of County Superintendent of Education  
SOUTH CAROLINA  
Seneca  
Holleman, Frances, Teacher-Helper  
Spartanburg  
Bowers, Lucile  
542 Palmetto Street  
Brooks, J. F., County Superintendent of Education  
Clayton, Mrs. M. F., Supervisor, Inter-mediate Grades  
129 Carlisle Street  
Columbia  
Brunson, Mrs. DeWitt, State Depart-ment of Education  
Wade, Hampton Office Building  
Cashner, W. J., Supervisor of elemen-tary Schools  
Ellis, R. J., Principal  
2731 Devine Street  
Jagers, R. B., Professor of Elementary Education, School of Education  
University of South Carolina  
Johnson, C. A., Supervisor of Negro Schools  
Carter Junior High School  
Payne, J. M., Assistant Superintendent of City Public Schools  
Rowland, Almie Lee, State Department of Education  
Thomas, Martha E., Director  
Division of Elementary Education  
State Department of Education  
Darlington  
McArthur, L. C., Jr., Elementary School Principal  
114 St. John's Street  
Ellmore  
Hungerpiller, Lois  
Florence  
Gee, Hazel O., Curriculum Coordinator  
216 W. Palmetto Street  
Greenville  
Futch, Olivia, Head of Department of Education  
Furman University  
Gaulx, M. G.  
Lorings, W. F., Superintendent of Schools  
17 Westfield Street  
Moore, Lena, Greenville City Schools  
17 Westfield Street  
Hartsville  
Holler, J. C., Superintendent City Schools, Box 735  
Lexington  
Harman, H. Odelle, Superintendent  
McBee  
King, Estelle H., Teacher-Helper  
Department of Education  
McCorick, L. B., Superintendent  
Mullins  
Mullins Public Schools  
Orangeburg  
Brunson, Mrs. Edwitt, Director of Instruction  
Rushon, E. W.  
M Box 657  
Rockhill  
Crowder, Mary, Supervisor 6th Grade  
Winthrop Training School  
Frick, Herman, Director  
Teachers Education, Winthrop College  
Rogers, Hortense, Supervisor of High School Mathematics  
Winthrop College  
Seneca

- Hill, J. Davis, Principal  
Ball High School  
Johnson, Frank C., Principal  
Stephen F. Austin Junior High School
- Gladeater School  
Cleveland, E. D., Superintendent  
Gladeater Public Schools
- Goose Creek  
Sparks, R. B., Principal  
Robert E. Lee High School
- Houston  
Cassell, Mabel V., Director of Curriculum  
1315 Eagle Avenue  
Donner, Arvin N., Assistant Principal  
of Elementary Grades  
3344 Wichita Street  
Spivakowsky, Cecilia  
4362 Ruth Street  
Trallman, Pearl, Assistant Superintendent of Junior High School  
1500 Louisiana Street
- Jasper  
Stewart, Mrs C. E.  
P. O. Box 523  
Kilgore  
Hubbich, Elizabeth, Co-ordinating Principal
- Kingsville  
Biggs, Maurine, Coordinator of Arts & Industries  
Texas College of Arts & Industries  
Lockhart  
Buckley, J. L., Superintendent of Schools  
Lubbock  
Lomax, Dorothy, Director of Secondary Curriculum  
3105—21st Street
- Marshall  
Forsyth, Norma, Principal  
602 W. Rusk Street  
Nacogdoches  
Harvin, Mrs. R. R., County Supervisor  
County Department of Education  
North Street Station
- Orange  
Free, Raymond J., Chairman Languages & Arts  
348 Rogers Court  
Kittiman, C. J., Coordinator Math-Science  
Orange Public Schools  
Young, Epie, Director of Elementary Education  
804 Fifth Street
- Overtown  
Hale, Pauline, R. E. D. 1  
Pasadena  
Watson, Vesla I.  
103 East Texas Avenue  
Lottin, Blanche C.  
Devlin, Marie, Second Grade Teacher  
1302 W. 7th Street
- Prairie View  
Freeman, A. C., Prairie View University  
Robstown  
Chas T., Principal  
Robert E. Lee High School  
Box 1152  
San Antonio  
Burke, Margaret E., Elementary Principal  
719 Lamar Street  
Robert E. Lee School
- Calveston  
Clark, Ray I. Bouite, Teacher  
3806 Sealy Street
- Box 278, Texas Christian University  
Education  
Smith, Raymond A., Dean, School of Rarthen-Primary Education  
4020 Clarke Avenue  
Kuykendall, Ima L., Director Kinder-Port Worth  
2930 Lebanon Street  
Ernst, Dorothy, Principal  
Schools, Box 1710  
England, Byron, Supervisor Public Schools, Texas State Teachers College  
North Texas  
Webb, James F., Department of Education  
Texas State College for Women  
School, Box 3771  
Pierce, Thomas E., Demonstration Teachers College Station, Box 359  
Education  
Mathews, J. Carl, Dean School of Denton  
University  
Williams, Frank L., Southern Methodist  
3610 Cornell Street  
Wasson, Margaret, Director of Curriculum Publication  
311 N. Waverly Drive  
Moss, Lucile  
Dallas Public Schools  
Dallas  
Dent, Charles H., Assistant Superintendent of Elementary Grades  
3212 Cochran Street  
Brashear, Mrs. J. T., Director  
East Texas State Teachers College  
Chenoweth, Elizabeth, Coordinator Commerce  
West Texas State Teachers College  
Department  
Newsom, A. Carolyn, Home Economics  
1005—6th Avenue  
Bridges, Cecil, Principal  
Hornbaking Education, Box 422  
Armstrong, Gladys, Area Coordinator Canyon  
Evans, Idaris, Elementary Supervisor  
Bonham  
McWilliams, Alyce  
150 East Virginia Street  
McFarland, Lera, Teacher Mathematics  
700 Palm Avenue  
Martin, E. A.  
c/o Beaumont City Schools  
Beaumont  
Hill, H. Ishmael  
121 West 7th Street  
Whitenburg, Charles, Texan Hotel  
University of Texas  
& Instruction, School of Education  
Umsatid, J. G., Chairman Curriculum  
101 East 9th Street  
Stryley, T. O.  
3304 Gilbert Street  
Pecham, Dorothy Reed  
University of Texas  
Otto, Henry J., School of Education  
500 East 42nd Street  
Newsom, H. A., Principal  
University of Texas  
Martin, Cora M., Professor of Education  
University of Texas  
Room 303, Extension Building  
Knight, James, Professor



- Oak Ridge  
Parker, Hillary D., Principal  
185 Outer Drive  
Paris  
P. O. Box 466  
Parsons  
Stevens, Billie J.  
Pleasant Hill  
Pleasant Hill Academy  
Pulaski  
Kaiser, D. H., Elementary Supervisor  
Giles County  
Rogersville  
Almokey, Ruby, Elementary Supervisor  
Box 162  
Wright, Kathryn, Supervising Teacher  
McNairy County Schools, Selmer  
Sevierville  
Hale, Marie, Supervisor  
Spencer  
Perry, Eva, Supervisor  
Van Buren County  
Springfield  
Payne, Madeline, Elementary Supervisor  
Tracy City  
Schulze, Bertha, Elementary Supervisor  
Trenton  
Box 84  
Baker, Mary, Associate Supervisor  
Box 31  
Union City  
Hilliard, C. D., County Supervisor  
Dum 57  
Waverly  
Adkins, Lucille, Supervising Teacher  
Maple Avenue  
Winchester  
Rosbertson, Lucy Belle, Supervisor of  
Elementary Schools  
TEXAS  
Abilene  
Hatchett, Ethel L., Supervisor  
Hardin Simmons University  
Newson, H. A.  
1942 Swenson Street  
Amarillo  
McDonald, Annie L., Supervisor of  
Elementary Grades  
Senior High School  
Selby, Robert A., Director of Secondary  
Curriculum and Guidance  
4248 West 14th Street  
Austin  
Allen, Mrs. Corrie W., Associate Profes-  
sor of Curriculum & Instruction  
University of Texas  
Ayer, Fred C., Professor of Education  
Administration  
University of Texas  
Bollman, Thelma Anderson, Assistant  
Professor of Curriculum & Instruc-  
tion, Extension Division, University  
of Texas  
Cawthon, John A., Graduate Student  
304 1/2 West 13 Street  
Haskew, L. D., Dean, College of Edu-  
cation  
University of Texas  
Hendricks, Jake J., Educational Rep-  
resentative, Macmillan Company  
#6 Enfield Road  
Hornsby, Myrtle  
1017 East 49th Street
- Fleming, Robert S., Associate Professor  
College of Education  
University of Tennessee  
Fuller, John J., University of Tennessee  
James, Virginia White, Tennessee Valley  
Authority  
311 W. Glenwood Avenue  
Johnson, Collins O.  
2102 North Broadway  
Ramer, Earl, College of Education  
University of Tennessee  
Young, Albert, Associate Professor  
Home Economics Education  
Lexington  
Oakley, Louise, Elementary Supervisor  
Henderson County Schools  
Linden  
Kimble, Ethel, Elementary Supervisor  
Ferry County Schools  
Livinston  
McDonald, Nola S.  
Department of Education  
London  
Cook, May R., Supervisor  
Manchester  
Hoover, Souci  
Marvillie  
Burrell, Elsie, Elementary Supervisor  
Lomas Addition  
McMinnville  
Mason, Bessie Lee, R. F. D. 5  
Memphis  
Kauscher, Arthur C., Jr., Supervising  
Teacher, County Schools  
301 Courthouse  
Rudisill, Zella L., Principal  
Rozelle School  
Roland & Walker Streets  
Williams, Margaret, Board of Education  
317 Poplar Avenue  
Murfreesboro  
Hall, Mary, Regional Elementary  
Supervisor  
State Teachers College  
Kirksey, Howard G., High School Visitor  
Middle Tennessee State College  
Simpson, R. J., Middle Tennessee State  
College  
Nashville  
Chenault, R. N., Principal  
1501 Garthland Avenue  
Frost, Norman  
Peabody College for Teachers  
Harp, Henry, George Peabody College  
Hoyt, Mildred, Director of Remedial  
Peabody College  
Kier, Doll C.  
Box 6, Peabody College  
McCarthy, Mary  
Box 215, Peabody College  
McCracken, R. W.  
1708 Natchez Trace  
Reynolds, James W., Professor of  
Education  
George Peabody College for Teachers  
Southall, Maycie, Teacher of Education  
College for Teachers  
Southern, W. B., George Peabody  
College for Teachers  
Thomas, R. Lee, Supervisor, Division  
of Elementary Schools  
State Department of Education  
Waters, George Hugh, Supervisor  
Secondary Education  
2003 Greenwood Avenue

Neal, Elma A., Assistant Superintendent  
Elementary Division  
141 Lavaca Street  
Sister Adelaide Marie  
Our Lady of the Lake College  
Stark, Helen V.  
414 Florida Street  
San Augustine  
Payne, Elma J., Elementary Principal  
Box 472  
Talgo  
Hughes, J. Lyndal, Superintendent  
Box RR  
Temple  
Humphrey, J. R., Municipal Building  
Velasco  
Brown, Mary Alice, Primary Principal  
Velasco Elementary School  
King, O. B., Box 454  
Waco  
Brandon, Bertha M., Elementary  
Supervisor  
Waco Public Schools  
Butler, Marion C., Assistant  
Superintendent  
2316 Colcord Avenue  
Fothergill, Mrs. Charles S., Primary  
Supervisor  
McLennon County, Courthouse  
Lux, Clara  
1326 South 5th Street  
Webster  
Greene, P. H., Superintendent  
Webster Independent School District  
McWhirter, Margaret, Elementary  
Principal  
Weber, Alan G., High School Principal  
West Columbia  
Haines, Hazel S.  
P. O. Box 181  
Winters  
Lasater, I. L., Superintendent of Schools  
White Deer  
Weeks, Mrs. B. R., Director Supervision

## UTAH

Beaver  
Bennett, Erma  
Brigham City  
Jensen, Norma, Primary Supervisor  
Board of Education  
Fillmore  
Broesbeck, Lue, Primary Supervisor  
Board of Education  
Huntington  
McMillan, Mary L., Elementary Super-  
visor  
Marysvale  
Oscarson, J. E., Superintendent  
Piute School District  
Ogden  
McCracken, Sara, Elementary Supervisor  
3065 Washington  
Miller, William P., Assistant Superin-  
tendent, Ogden City Schools  
2351 Grant Avenue  
Panguitch  
Rogers, Sadie, Elementary Supervisor  
Garfield County School District  
Price  
Valentine, Ruth, Elementary Supervisor  
Carbon County School District  
Provo  
Andrew, Cathryn M., Elementary Super-  
visor  
Box 309  
Moffitt, J. C., Provo Public Schools

Peterson, Hermese, Elementary Training  
School  
Brigham Young University  
Richfield  
Nielson, Mary, Supervisor  
Sevier School District  
Salt Lake City  
Arnesen, Arthur E., Supervisor of  
Curriculum & Research  
440 East 1st South Street  
Campbell, Jennie, State Director of  
Elementary Education  
223 State Capitol  
Clark, Arthur O., Supervisor  
3212 South State Street  
Hardman, Maud R., Supervisor of Art  
440 East First Street South  
Morris, Nerva R., Supervisor of Music  
440 East 1st South Street  
Williams, Margaret, Director, Elemen-  
tary Education  
Granite School District  
3234 S. State Street  
Sandy  
Jensen, Fredia, Primary Supervisor  
112 West 1st Street N.  
St. George  
Winsor, Tillie, Elementary Supervisor  
Vernal  
Shaffer, Pearl, Teacher  
Box 279

## VERMONT

Barre  
Taylor, Charles, Barre City Schools  
Bennington  
Lanigan, Mary A., Elementary Super-  
visor  
246 Union Street  
Burlington  
Hunt, Lyman G., Jr.  
37 Cliff Street  
Rutland  
Allingham, Jennie C.  
21 Woodstock Avenue  
South Ryegate  
Hall, Elizabeth  
Springfield  
Barden, M. Corinne  
128 Olive Street  
Jenkins, Ethel M., Elementary Super-  
visor  
Springfield Public Schools

## VIRGINIA

Abingdon  
Lester, Eleanor, Elementary Supervisor  
Washington County Schools  
Alexandria  
Richardson, Howard R., Assistant Super-  
intendent  
207 S. Patrick Street  
Amelia  
Coleman, Mary E., Elementary Super-  
visor  
Appomattox  
Savage, Mary A., County Supervisor  
Arlington  
Dankers, Mrs. George  
712 S. Admas Street  
Gravatte, Florence, Elementary  
Supervisor  
4400—18th North  
Johnson, Emily W., Research Assistant  
2139 N. Quebec Street  
Pitts, Claudia B.  
1026 South Rolfe Street

- Rich, W. W., Jr., Director of Instruction  
Courthouse  
Root, Blake S.  
412 N. Thomas Street  
Smith, Gertrude, Supervisor of Schools  
Rosslyn Post Office  
Wilhelms, Fred T., Assistant Director  
Consumer Education Study  
3111—20th Street North
- Bedford  
Duskill, Madeline, Elementary Supervisor  
Liberty Academy  
Blackstone  
Bierbower, Ada R., Elementary Supervisor  
618 S. Maine Street  
Bowling Green  
Angle, Oakie, Box 251  
Lockhart, Lucy, Supervisor of Instruction
- Bristol  
Robinson, Ruth, Elementary Supervisor  
824 Fairmount Avenue  
Buckingham  
Blakey, Letitia, Elementary Supervisor  
Buckingham County  
Covington  
Hodnett, Walter L., Elementary Supervisor  
School Board Office  
Howell, Catherine, Elementary Supervisor  
Alleghany Public Schools
- Crozet  
Washington, M. B. Mrs., Supervisor of Elementary Education
- Culpeper  
Einstein, Helen  
109 W. Slaughter
- Danville  
Powell, Mary E., Principal  
Robert E. Lee School  
Loyal Street
- Dinwiddie  
Ellmore, Elizabeth, Supervisor of Instruction  
East Hampton  
Alexander, Marie, Supervisor of Elementary Instruction  
8 River Road
- Faber  
Martin, Zadie D., Supervisor
- Fairfax  
Fellows, Jeanette Luther  
Supervisor of Instruction  
Moore, Emma O.  
R. F. D. 3, Box 707
- Falls Church  
Robinson, Charles H., Jr., Falls Church High School
- Farmville  
Carter, Alice E., Supervisor 6th Grade, Campus Training School  
702 High Street  
Johnson, Edgar M., Director Bureau of Teaching Materials  
State Teachers College
- Fork Union  
Heard, L. Wallace, Miss
- Franklin  
Puckette, Cornelia, Elementary Supervisor  
P. O. Box 205  
Fredericksburg  
Graves, E. Boyd, Associate Professor of Education  
Mary Washington College
- Miller, C. W., General Supervisor  
Fredericksburg School Department  
Front Royal  
Keyser, Mrs. Leslie Fox, Supervisor of Elementary Schools  
Gloucester  
Miles, Agnes, Supervisor Gloucester County Schools  
Goochland  
Green, Caroline U., Elementary Supervisor
- Gore  
Beable, Paul D., Principal
- Grundy  
Sutherland, Edwin S., Elementary Supervisor  
P. O. Box 55
- Halifax  
Barksdale, Mary O., Supervisor of Elementary Schools
- Hampton  
Bryant, Alice G., Elementary Supervisor  
8 River Road  
Chandler, Elizabeth W., Associate Professor of Education  
Hampton Institute  
Box 24  
Gholson, G. James  
George P. Phenix High School  
McCoy, Margaret Treherne, Elementary Supervisor  
Elizabeth City County Schools  
Mitchell, Eva C., Supervisor  
Elementary Student Teaching  
Hampton Institute
- Harrisonburg  
Dinwiddie, Mary, Rural Elementary Supervisor  
Wellington Apartments  
Main Street  
Pence, Wilbur S., High School Counselor  
Madison College  
Shull, Lucibel  
473 S. Mason Street  
Stanley, B. L., Principal  
56 Cantrell Avenue  
Staples, Mrs. J. Kemper, County Supervisor  
550 South Mason Street
- Hopewell  
Pond, Eleanor, Elementary Supervisor  
Patrick Copeland School
- Huddleston  
Turner, Reva, Elementary Supervisor  
Bedford County
- Jewell Ridge  
Penny, Blanche, Supervisor of Schools  
Jewell Ridge School
- Jonesville  
Richmond, John A., Director of Instruction  
Lee County Board of Education
- Kenbridge  
Wingold, Elsie Judy, Elementary Supervisor  
Box 196
- Kilmarnock  
Whaley, Frances T., Elementary Supervisor  
King William  
Hamilton, India
- Lebanon  
Reynolds, Robert P., Director of Instruction
- Leesburg  
Dale, Adelaide, Elementary Supervisor  
Loudoun County  
Haertel, Helen, Director of Instruction  
Loudoun County School Board



- Winchesler  
Quarles, Garland R., Superintendent of Schools  
Starling, Annie Preston, Board of Education, Rural Supervisor  
Frederick County  
Woodstock  
Taylor, Lola A., Elementary Supervisor  
Shenandoah County
- WASHINGTON
- Auburn  
Dale, Adelaide S. E.  
24 C Street  
Battle Ground  
Hassler, Arthur, Assistant Superintendent  
Turney, David T., Supervisor of Curriculum  
Battle Ground Consolidated Schools  
District #115  
Bellingham  
Hammer, Irwin A., Chairman  
Department of Education  
West Washington College of Education  
Haw, Raymond R.  
500 State Street  
Skene, Beatrice  
2701 Eldridge Avenue  
Bremerton  
Kohler, Barbara Elise, Supervisor of Elementary Education  
Central School Office  
5th and Warren  
Ullin, Chet, Director of Instructional Materials  
Bremerton Public Schools  
Central Office  
Wajals, Pauline, Assistant in Instruction  
Central School Office  
Chenails  
Crum, J. Wesley, Superintendent c/o Chenails Public Schools  
Colfax  
Osborne, R. E., Superintendent Colfax High School  
Comas  
Olds, Dolph, Superintendent of Schools  
Des Moines  
Hicks, Bennie, Principal  
Ellensbur  
Heber, Amanda, Director of Teacher Training  
Central Washington College of Education  
Hunter, Gladys M., Central Washington College of Education  
Jensen, Alice Marie, Kindergarten Supervisor  
Central Washington College of Education  
Shuck, Frances, Central Washington College of Education  
Kelso  
Crosby, Lydia F., Superintendent of Schools, Cowlitz County  
Kennewick  
Witt, Carl O., Principal  
Junior High School  
Kirland  
Johnson, Morton A., Superintendent of Schools  
Longview City Schools  
Lounsbury  
Bryson, Roy G., Supervisor of Music
- McNamara, E. J., Superintendent of Schools  
Millikan, Scott, Assistant Superintendent  
Longview Public Schools  
Reese, Chester M., Principal  
St. Helens School  
Schreffsky, Dora B., Elementary Supervisor, Keesler School  
Lynden  
Hankamp, George, Mrs.  
Box 287  
Olympia  
Black, William A., State Department of Education  
Lacy, Susan, State Department of Education  
Olson, Edward G., Department of Education  
R. F. D. 5, Box 577  
Omak  
Ayers, Al  
Port Orchard  
Goff, Mary Downer, Supervisor of Special Education  
South Kitsap High School  
Haugan, S. M., Principal  
R. F. D. 3, Box 291  
Knowles, Joe C., Superintendent  
South Kitsap, School District No. 402  
Pullman  
Foot, W. W., Librarian  
State College of Washington Library  
Gradnager, W. G., Head  
Bureau of Visual Teaching  
Katterle, Zeno, School of Education  
Washington State College  
Lee, J. Murray, Dean  
School of Education, Washington State College  
Ohlsen, Merle M., Washington State College  
Thorne, Thelma, Assistant Professor Home Economics Education  
State College of Education  
Hannawalt, P. B., Superintendent  
Box 327  
Ridgefield  
Schmidt, C. R., Curriculum Supervisor  
P. O. Box 91  
Seattle  
Amend, John, Curriculum Director King County Schools  
Danner, Earl Y., Director of Science  
810 Dexter Avenue  
Draper, Edgar M., Professor of Education, University of Washington  
4007 48th Street, N. E.  
Goldsmith, Virginia, Director  
4045 Brooklyn  
Goodwin, Dorothy  
4210 Brooklyn  
Hayden, Alice H., Assistant Professor of Education, 113 G Education Hall  
University of Washington  
Jackson, Dorothy, Director Kindergarten-ten Primary Education  
810 Dexter  
Kruener, Donald L.  
3202 East 85th Street  
Laurie, Helen, Supervisor of Elementary Education  
810 Dexter Avenue  
Mercer, Freeman J., Elementary Principal  
17011 35th Avenue S. W.



Remington Fox, Lura G., Supervisor Fauquier  
 County  
 Richmond  
 Davis, Merle, Assistant State Super-  
 intendent  
 State Department of Education  
 Henson, Elizabeth, Assistant  
 Supervisor of Elementary Education  
 State Board of Education  
 McIlwain, Orens, Associate Director of  
 Religious Education & Publications  
 Presbyterian Building  
 Overby, Ethel T., Principal  
 1000 W. Marshall Street  
 Elba School  
 Rowlett, Eleanor P.  
 4828 West Seminary Avenue  
 Stoddard, Jane, Supervisor of Special  
 Education  
 State Department of Education  
 Townes, Margaret O.  
 214 E. Clay Street  
 Wake, Oville W., Director of Elemen-  
 tary Education  
 State Board of Education  
 Ware, Juliet R., Supervisor of Elemen-  
 tary Education  
 State Department of Education  
 Roanoke  
 Camper, A. B., Director of Instruction  
 Box 2129  
 Simpson, Blanche, Elementary Principal  
 Virginia Heights School  
 Salem  
 Fark, Josephine N., Supervisor of  
 Schools  
 Staunton  
 Sinclair, William Taylor, High School  
 Supervisor  
 Augusta County Board of Education  
 Stony Creek  
 Freeman, Mrs. Philip, Supervisor  
 Sussex County Schools  
 Stuart  
 Thompson, Verlie, Supervisor  
 Patrick County Public Schools  
 Suffolk  
 Sasser, Roxie J., Elementary Supervisor  
 Box 340  
 Tappananoack  
 Erdman, Marguerite  
 Tazewell  
 Sutton, Virginia, Supervisor  
 Troutville  
 Phelps, Mary O., Elementary Supervisor  
 Urbanna  
 Hatcher, Ashton, Supervisor Mathews &  
 Middlesex Counties  
 Walkerton  
 White, Edna G. Holmes  
 Warm Springs  
 Bush, Bernice M., Elementary Super-  
 visor  
 Waynesboro  
 Glenn, R. B., Principal  
 Wilson-Jackson School  
 Wright, Nellie, Director of Instruction  
 200 Maple Avenue  
 Williamsburg  
 Oliver, George J., College of William  
 & Mary  
 Weeks, Helen Foss, Professor of Edu-  
 cation  
 616 Blair Avenue

Louisiana  
 Cusbwa, Virginia U., Elementary  
 Supervisor  
 P. O. Box 166  
 Luray  
 Rollins, Dorothy, Supervisor of Elemen-  
 tary Education  
 Lynchburg  
 Kizer, Elizabeth, Principal  
 226 Norfolk Avenue  
 Pratt, Dorothy I., Associate Professor of  
 Education and Supervision  
 Randolph-Macon Woman's College  
 Manassas  
 Ayres, Sue, Supervisor, The County  
 Board  
 Marion  
 Tate, Virginia, Supervisor  
 Smyth County Schools  
 Marshall  
 Trimbam, Eliza H., District Supervisor  
 Home Economics Education  
 Martinsville  
 Matthews, Sue, Elementary Supervisor  
 507 Mulberry Street  
 Melia  
 Lewis, W. A., Rural Supervisor  
 Newport News  
 Warren, Cynthia, Elementary Supervisor  
 89 Main Street, Hilton Village  
 Norfolk  
 Barnes, H. C., Director of Instruction  
 148 Granby Street  
 Beery, D. C., Norfolk City Schools  
 Charlotte & Banks Streets  
 Charleston, Glady's G., Supervisor, Elemen-  
 tary Education  
 School Administration Building  
 Bank & Charlotte Streets  
 Dammun, Charlotte, Elementary Principal  
 Patrick Henry School  
 Keech, Vera M.  
 148 Granby Street  
 Leigh, Aurella I.  
 1310 West 27th Street  
 McVorie, Gladys, Primary Supervisor  
 Norfolk City School Board  
 Peters, Mildred Dudley, Building  
 Supervisor  
 School Administration Building  
 Williams, Sherman J., Principal  
 608 Diven Street  
 Petersburg  
 Martinson, S. A., Supervisor of Elemen-  
 tary Education  
 School Board Office  
 Court House Hill  
 Portsmouth  
 Harrison, Anne, Supervisor  
 Apt. 8—412 N Street  
 Scott, Eleanor A., Elementary Super-  
 visor  
 2031 Craddock Street  
 Princess Anne  
 Luxford, Louise, Elementary Supervisor  
 Pukaht  
 Vaughn, Eva, Elementary Principal and  
 Supervisor  
 Jefferson School  
 Radford  
 Bennett, Etcelle, Supervisor  
 Box 92A, State Teachers College  
 Einsteln, Ida, Elementary Supervisor  
 1219 Lawrence Street  
 Graybeal, H. C., High School Counselor  
 State Teachers College